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ABSTRACT

The 20 member countries of the Caribbean Group for Cooperation and Development (CGCED) share with the rest of the world the common goals of reforming their education systems to equip Caribbean people for productivity, wealth creation, and social and personal development, and have participated in several regional and global initiatives. This education strategy report provides the framework for educational reform, necessary to address the demands of economic and social transformation in the Caribbean. The report comes in response to a request by CGCED for assistance in preparing a Caribbean Development Strategy to the year 2020 (Vision 2020), in which improving the education system is recognized as being fundamental. The report contains explanatory material, including abbreviations and acronyms, a list of figures, boxes, tables, and maps, and an executive summary. It is divided into four parts: (1) "Introduction" (which includes background, assumptions, key objectives, and limitations); (2) "Achievements, Challenges and Opportunities"; (3) "The Way Forward"; and (4) "External Financing of Education in the Caribbean." It concludes with an epilogue, a 22-item selected bibliography, and an extensive statistical annex. (BT)

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A Caribbean Education Strategy

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- Barbados
- Belize
- Dominica
- Dominican Republic
- Grenada
- Guyana
- Haiti
- Jamaica
- St. Kitts and Nevis
- St. Lucia
- St. Vincent and the Grenadines
- Suriname
- Trinidad and Tobago
- Turks and Caicos Islands

Agencies

Caribbean Examinations Council (CXC)
Organization of Eastern Caribbean States (OECS)
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Preface

This Education Strategy Report provides the framework for educational reform, necessary to address the demands of economic and social transformation in the Caribbean. It comes in response to a request by the Caribbean Group for Cooperation and Development (CGCED) for assistance in preparing a Caribbean Development Strategy to the year 2020 (Vision 2020), in which improving the education system is recognized as being fundamental. The other elements of the Vision are Governance and Social Justice, Managing the Environment, and Managing Risks.

The challenges and opportunities that are likely to present themselves in the twenty-first century have been a major source of debate during the last decade. In September 1999, various scholars from the Region, policy makers, representatives of the private sector and non-governmental agencies convened at a conference organized by the University of the West Indies (UWI), the Caribbean Community (CARICOM) Secretariat and the Caribbean Development to discuss the issues. Among the several proposals set forth in Contending with Destiny: The Caribbean in the 21st Century, a publication based on the presentations of the conference, is the need to rapidly re-shape the education systems to address future demands. The analysis of issues and strategic perspectives highlighted at the conference, provide a backdrop for this Paper.

The document also draws heavily on the deliberations of an Education Task Force of Caribbean nationals established to formulate an Education Strategy, which has taken into account the considerable work done in the area of education policy formulation within the Region, at the regional, sub-regional and national levels during the past ten years, all of which was based on wide consultation. The policies and strategies include "The Future of Education in the Caribbean: CARICOM Regional Education Policy (1993)"; "Foundation for the Future: Organization of Eastern Caribbean States (OECS) Education Reform Strategy (1991)"; "Regional Strategy for Technical and Vocational Education and Training"; "Policies to improve Basic Education in the Caribbean" in Education for All: Caribbean Perspectives and Imperatives (1992)", the recent CARICOM paper "Creative and Productive Citizens for the Twenty-First Century" (1997), "The St. Lucia Declaration about Higher Education in the Caribbean" in Higher Education in the Caribbean: Report on United Nations Education, Science and Culture Organization (UNESCO/CARICOM) Consultation on Higher Education in the Caribbean (1998), Education for All (EFA) in the Caribbean: Assessment 2000 and several national education policy documents. While maintaining the philosophical underpinnings of the above-mentioned papers, the Strategy is grounded in the available empirical data and analyses presented in various national, regional and international reports.

ABBREVIATIONS AND ACRONYMS

ACTI	Community
CARNEID	Caribbean Network of Education Innovation for Development
CDB	Caribbean Development Bank
CGCED	Caribbean Group for Cooperation and Development
CXC	Caribbean Caribbean Tertiary Level Institutions
CARICOM	Caribbean Examination Council
DFID	Department for International Development
EFA	Education for All
GDP	Gross Domestic Product
GED	General Education Development
GNP	Gross National Product
GTZ	German Agency for technical Cooperation
HEART/NTA	Human Employment and Resource Training Trust /National Training Agency
HIV	Human Immunodeficiency Virus
HRD	Human Resource Development
HRDC	Human Resource Development Center
IALS	International Adult Literacy Survey
ICWI	Insurance Companies of the West Indies
IDB	Inter-American Development Bank
IFIs	International Financial Institutes
IOB	Institute of Business
LAC	Latin America and the Caribbean
LMIS	Labor Market Information Systems
MOE&C	Ministry of Education and Culture
NAFTA	North American Free Trade Area
NGO	Non-Governmental Organization
OAS	Organization of American States
OECD	Organization for Economic Cooperation and Development
OECS	Organization of Eastern Caribbean States
PIOJ	Planning Institute of Jamaica
PISA	Program for International Student Achievement
SERVOL	Service Volunteered For All
SMILE	Science Matters in Life Everyday
UNDP	United Nations Development Program
UNESCO	United Nations Education, Science and Culture Organization
UNICEF	United Nations Children's Fund
UNIDO	Industrial Development Organization
USA	United States of America
USAID	United States Agency for International Development
UWI	University of the West Indies
UWIDITE	University of the West Indies Distance Teaching Enterprise
YTEP	Youth Training and Employment

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Executive Summary

Rapid and continuous technological change is accepted as a feature of the twenty-first century: its impact is felt globally. Labor intensive technologies are on the decline; scientific knowledge and technological principles are now considered key to increase productivity and wealth. The concomitant transformations in the global economy, international relations, and social institutions require a constant re-conceptualization and re-formulation of systems to steer and manage this process of change. Reform of education and training systems is therefore pivotal in preparing people to address the new market demands and to capitalize on emerging opportunities. Over the past two decades industrialized countries as well as the developing world have been engaged in a process of education reform.

The twenty member countries of the CGCED share with the rest of the world the common goals of reforming their education systems to equip Caribbean people for productivity, wealth creation, and social and personal development, and have participated in several regional and global initiatives. Despite the linguistic and economic diversity amongst the group, there are certain features which make the Caribbean region sufficiently similar, but distinct from the rest of Latin America to seek to formulate a common Caribbean Education Strategy. These include their primarily small population (21 million) and land area; relatively new states, except for Haiti and the Dominican Republic; limited natural resources; a high level of dependency on international forces; economic vulnerability; fragile ecosystems; and frequent natural disasters. These characteristics, specifically "smallness" "limited resources", "economic vulnerability " translate *inter alia* into strong external influences on policy formulation, fairly restrictive opportunities for economic growth, limited markets, difficulties in achieving economies of scale, and considerable resource constraints- human and financial.

With respect to education, these limitations are reflected in current staff inadequacies, quantitative and qualitative, a need for administration and teaching staff to be multi-functional, limitations in curricular offerings, and constraints in development of post-secondary education, particularly in the smaller territories. At the same time, "smallness" makes management of the systems and participation in the formulation and dissemination of reform measures at the national level easier. It is against this backdrop and the economic and social context that education reform must be formulated.

The Socio-Economic Context

It takes sustained macro-economic growth to finance the necessary education reforms and build the infrastructure to foster a knowledge society. Conversely, rapid and sustained economic growth will not be realized where education systems are ineffective and capacities remain limited. Gross Development Product (GDP) growth patterns vary by country. Over the past decade, economic growth in the region as a whole has been relatively slow, averaging approximately 2%, with some countries experiencing negative growth. Attempts by governments to counteract this and spur GDP growth have resulted in heavy indebtedness. The countries are adopting measures to move away from the predominantly mono-agriculture-based economies towards economic diversification. Diminishing preferential market access, the need to generate employment and stem unemployment in the face of a burgeoning labor force (which is expected to increase significantly by over 50% by 2020) are conditions which call for attention. Tourism, construction, and the services sector have been the major growth areas, and efforts are afoot to expand these areas further. However, the strategies (increasingly reliant on higher levels of

education, skills and technology), intended to promote development, often pose threats to the environment and societal values and institutions.

Widening disparities in educational attainment among the different socioeconomic groups reinforce and contribute to the increasing stratification in the societies with the attendant social ills. Today, Caribbean countries are grappling with high levels of crime and delinquency, some of this associated with narco-trafficking, large numbers of out-of-school under-educated youth, growing social and economic inequities, and high unemployment. This is testimony to the weak economies. In addition, there are concerns regarding the rapid spread of the Human Immunodeficiency Virus (HIV) virus, as well as health and nutritional issues particularly amongst the lower socioeconomic groups.

Despite adverse conditions, there are significant opportunities on the horizon, which have positive implications for education:

- global demand for new products and services and greater access to communication technologies can enable the region to attract knowledge based industries and services, explore the potential of developing industries based on their untapped resources in music, arts and crafts, design, sports, and dance as well as provide a more diversified tourism product .[1] Higher levels of education would be essential to seize these opportunities;
- declining birth rates, and the consequent decline in school enrolments in most countries, release the pressures to increase places at the primary level and afford some opportunity to expand secondary level, and address the qualitative deficiencies in the systems;
- the increase in youth 15-24 and the labor force will continue with a consequent decline in dependency ratios. This presents both an opportunity and a challenge – first to utilize this resource productively and second, to provide upper secondary, and post-secondary level education, training, and continuing education for the large numbers of under-educated out of school youth (15-24) throughout the region; and
- heightened public awareness of the social and economic issues - regionally and globally, and social pressure for equitable development are forces which are propelling these countries and their international partners to move swiftly to define priorities for action, and accelerate regional cooperation in identifying flexible, efficient measures to address their social and economic issues.

Characteristics of the Education Sector

Significant and consistent public investment in education, in relation to their economic status, is being made in most countries in the region. Except for Haiti, more than 85% of total investment in education is derived from the public sector. Education expenditure as a percentage of GDP ranges from approximately 2% in the Dominican Republic to 7% in Jamaica. The regional average is approximately 4%, compared with 3.3% for low and middle-income countries, and 5% in high-income countries.

Undoubtedly, (again with the exception of Haiti), and relative to middle income countries with which they are classified, tremendous strides have been made particularly with respect to

[1] The embryonic entertainment industry has received a psychological fillip with the steelpan having been declared the only musical instrument invented in the twentieth century and Bob Marley's album "Exodus" acclaimed the "album of the century".

access to basic education over the past thirty years. Virtually all countries provide some form of basic education for all students up to the age of 14. Most countries offer pre-primary education to approximately 80% of the age cohort, but in general, (Guyana being a noteworthy exception), *this* is privately funded. Steady progress is being made towards attaining the goal of universal secondary education. This has already been achieved in the Bahamas, Barbados, St. Kitts and Nevis, and in the dependent countries – British Virgin Islands, Cayman Islands, and the Turks and Caicos Islands. The larger territories – Dominican Republic, Jamaica, Trinidad and Tobago- and the OECS have transition rates ranging from 50-70%.

Besides giving emphasis to increasing access, attention is being made to improving quality. There have been collaborative efforts in areas such as curriculum development, and teacher training, and CARICOM countries have established a regional examinations body – The Caribbean Examinations Council (CXC) for testing at the secondary level. Enrollment at the tertiary level has been growing; however, it is relatively low ,ranging from less than 2% in Turks and Caicos Islands to 22% in the Dominican Republic with a regional average of 9%. Cuba stands at 13%; the global average is 18% and 10% in low and middle-income countries. In the OECD countries, the enrollment rate is 51%, and in other Latin America and the Caribbean (LAC) countries, the rate ranges from 10 to 25%. The goal of CARICOM countries is to provide for 15% of the age cohort by 2005. With respect to all CGCED member countries, the Bahamas, Barbados, and the Dominican Republic now exceed that target.

The Shortfall

Despite the progress being made, there are several deficiencies to be addressed, particularly in the face of new demands. They largely pertain to:

- access at the secondary and post-secondary levels;
- the effectiveness of the education systems; and
- equity.

Access and Coverage

Need for Expansion of Secondary Education. Successful completion of secondary level education is important for employment in a modern economy and building the foundation for an expanded and diversified tertiary level sub-sector. Although there has been progress in expanding access to these levels of schooling, the challenge remains. Most governments need to continue to focus on achieving the goal of universal secondary level education. Some countries have been attempting to accelerate the process through the conversion of schools, as well as new construction. The provision of places, however, must be viewed as part of a comprehensive reform effort. The process requires attention not only to the design of the physical infrastructure, but to the need to deliver a broad-based curricula geared to the total development of students, and to equip them for the world of work. In addition, the systems must provide the necessary student support services to promote higher levels of achievement and well being. In the smaller countries in particular, there will be a need to search for creative approaches to offer the diversified curriculum and services in a cost-effective way.

At the same time, there is increasing demand for post secondary education, particularly in the areas of science, technology and management. This is critical if the region is to steer its development and be equipped to address the challenges ahead.

Effectiveness

Low School Achievement. At the primary level, repetition rates are low and completion rates are close to 100% in most of the English-speaking countries which is largely due to a policy of automatic promotion. Based on the proportion of students placed in remedial classes at the secondary level, however, approximately 25 to 30% do not acquire the basic cognitive skills to benefit from education at that level. Some of this under-achievement is due to poor attendance, particularly in remote communities; some to failure of the school system to diagnose learning difficulties, and some to inadequacies in the teaching and learning process. In the Dominican Republic, 49% of students complete the primary level, while in Haiti the figure is 40%. Although transition to the secondary level is somewhat higher in the CARICOM countries, ranging from approximately 50 to 100%, the under-preparedness of students is a major problem as noted above. Attrition is high (approximately 50%) after age 15 - the end of compulsory education in most countries, and the dropout rate is decidedly higher among males. Of the students who complete the secondary cycle in the CARICOM countries, only approximately 30% qualify to receive certification which would enable them to gain admission to a tertiary level institution. It should be borne in mind that students who attempt the examination at the General/Technical level represent about 50% of the secondary level intake and about 25% of the age cohort[2]. Students show severe deficiencies in mathematics . On average, approximately 35% receive an acceptable grade. Furthermore, an analysis of subject areas being pursued raises questions as to whether a sufficiently large number of students are acquiring competencies in areas which would enable them to function effectively in the twenty-first century, where the knowledge and skills derived from study of sciences, technology, mathematics, foreign languages, and social studies would be important. An analysis of students writing CXC examinations in 1998 shows that less than 20% take science subjects, fewer than 15% foreign languages; just 10% in food and nutrition, and 7% in information technology, an area of importance in the services sector.

Labor Force Competitiveness. A burning issue relates therefore to the level of competitiveness of the labor force. While an assessment of their educational status reveals generally high literacy rates, except for Haiti, where 60% of the population is illiterate, the knowledge and skills in demand in the labor market go beyond the traditional literacy assessments[3]. If secondary completion is used as the yardstick for assessing the competitiveness of the labor force, based on household surveys, less than 20% boast this attainment, compared with 70% in the OECD countries, and over 60% in Singapore. An increase in the number of persons with secondary qualifications is clearly imperative. Besides the cognitive skills, today's worker must possess appropriate attitudes to the world of work, and sound communication skills. A recent study conducted in the Region by Industrial Development Organization (UNIDO) identified attitudinal and communication deficiencies in employees in the industrial sector.[4]

Equity

Social Equity. When the education systems are assessed in terms of social equity, several concerns come to the fore. Students from lower socioeconomic groups tend not to survive the

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[2] Students may write examinations at the general/technical level or the basic level. The latter is not widely accepted for employment in the public sector or for admission to post-secondary education institutions.

[3] Recent International Adult Literacy Surveys attempt to measure the more sophisticated skills required. No Caribbean country has participated in these surveys, so it is difficult to assess where they rank on an international scale

[4] D. Bhajan et al. Report on Preparatory Assistance for Strengthening of Training Capability of the Caribbean Sub-Region for Human Resources Development,UNIDO.

process of schooling. What is not now clear is the extent to which education systems are exacerbating the problem of social inequity. There is evidence to suggest that there is considerable stratification of schools and variability of inputs. In general, poorer students in urban as well as in rural areas attend schools which receive fewer and lesser quality resources. In terms of the curricula and learning materials, teaching staff and their families cannot afford the supplementary resources which the more well- to- do can provide when school resources are limited. In some remote communities, there is inadequate access to education services beyond the primary level. This, compounded with a home environment, which, in most cases, does not reinforce skills being taught at school, may account for the high level of underachievement and attrition amongst the economically and socially disadvantaged groups. The most glaring inequities are at the upper secondary and tertiary levels where the lowest quintiles are under-represented. These inequities are not only manifest as under-achievement but also in the rapidly rising juvenile delinquency and crime rates; reduced productivity and lower incomes of the population affected. As countries continue to conduct poverty assessments, become more adept at sector analysis, and more specifically disaggregate the costs and financing of education, the inequities in the education systems will become more apparent.

Gender Equity. In terms of gender equity, both boys and girls have equal access, but there is growing disparity in participation rates between boys and girls at the secondary and tertiary levels. Fewer boys gain a place at secondary level where there is competition for places. They perform less well and there is a higher attrition rate than girls. As a consequence, they are outnumbered by girls at the tertiary levels. The ratio at the University of the West Indies (UWI) is 67: 33 in favor of females. Recent studies on gender emphasize the need for measures to be taken to promote the motivation of boys and higher levels of performance. It should be noted that although participation rates and achievement are higher for girls, there is still the tendency for girls to pursue the traditional "female" subjects and avoid technical subjects. Although the trend is changing, as yet, not all girls are choosing to study non-traditional subjects.

Reform Initiatives

All countries in the region are aware of the shortcomings in the education system, and many are undertaking comprehensive education reform. Within the broad framework of a number of global, regional and sub-regional initiatives: EFA, Summit of the Americas Education Agenda, CARICOM Education Strategy, OECS Education Reform Strategy. Major objectives include increased access to secondary and post secondary education, improved quality at all levels, and improved management. These strategies have spawned a plethora of projects, which receive support including policy advice from a wide range of multilateral and bilateral partners. They include the World Bank; the Inter- American Development Bank (IDB); Caribbean Development Bank (CDB); the European Union (EU); UNESCO; United Nations Children's Fund (UNICEF); Department for International Development (DFID) and German Development Agency (GTZ).

The previous and current reform initiatives provide the platform for the Strategy proposed. It underscores, as a prerequisite, the need for stocktaking at the national and regional levels to determine the areas of convergence with respect to objectives and reform activities. It advocates that each country thoroughly review, consolidate and accelerate these reform initiatives as appropriate to the respective national circumstances. Particularly in the larger countries where there are multiple partners, there is need to critically assess areas where there may be duplication and consequent inefficiencies in the use of staff. This includes the need to stream-line activities to reduce the effects of "project fatigue," which result from the varying guidelines and reporting demands of different agencies. There is also need to expedite implementation to achieve agreed

targets, and assess impact to date. Importantly, current initiatives to strengthen management in areas such as *data* collection and analysis, to undertake sector analyses, policy formulation, and program development, should be accelerated since these are important to the reform process, and are all essential skills for effective project design, negotiation, project implementation, management and evaluation. Furthermore, enhanced financial management capabilities are critical to improving the efficiency of the system.

The Strategy

The Strategy emphasizes the need to remodel the education systems to cope with a future whose only certainty is change. It pre-supposes an integrated approach to Human Resource Development, and calls for focus on some fundamental questions:

- Will Caribbean people be adequately equipped with the knowledge and skills to contribute to economic and social growth, and compete in a global arena where knowledge is the primary resource?
- To what extent are present efforts sufficiently targeted at eradicating the inequities in the education system, which consistently mirror and perpetuate social inequities?
- Given the importance of regional cooperation as a mechanism to improve economic competitiveness, to what extent are the education systems promoting the concept of regional integration and inculcating the necessary skills for leadership, team building, and negotiation to make it a reality?
- Are the values and attitudes associated with the promotion of productive, responsible Caribbean citizens being fostered?

Objectives

The strategic objectives are:

- an internationally competitive labor force; and
- equitable, effective education systems.

The above-mentioned objectives will be realized through the following strategies:

A. **Narrowing the Knowledge Gap**

In order to address the knowledge and skills gap identified in the present labor force, as well as to ensure increased access and improved learning outcomes in the school age population, measures to acquire, generate, apply and disseminate knowledge must be put in place. Based on a clearly articulated life-long learning policy, countries will need to promote continual learning with a view to raising the mean educational level of the population to 50% with secondary level certification, and 25% with tertiary level qualifications by 2020. It will be important to:

- specifically target the large numbers of persons in the work force who have had some secondary schooling but do not have secondary completion qualifications and skills; establish flexible means for increasing access to secondary and post-secondary levels of education, to include on the job and out of school programs, distance education technologies and interactive learning mechanisms; and harness the resources of the media, non-governmental organizations (NGOs) and the private sector to focus attention

on learning as an important tool for economic, personal and societal development, and to assist in providing educational programs;

- widely disseminate information on best practices including successful out of school initiatives such as Service Volunteered for All (SERVOL);
- assess the knowledge of Caribbean people in relation to global standards through participation in surveys such as the International Adult Literacy Survey (IALS) and the Program for International Student Achievement (PISA);
- strengthen capacities to measure learning and develop and implement new approaches to assess knowledge and skills out of school or on the job, in line with the General Education Development (GED) examination of the United States;
- broaden the skills base to promote mastery in core areas such as literacy, science, technology, mathematics, foreign languages, communication skills; with emphasis on the development of critical thinking skills at all levels;
- continuously upgrade teaching staff;
- strengthen linkages between school and the world of work; and
- promote the generation and acquisition of knowledge through the establishment and strengthening of management information systems, identifying areas of research, fostering an understanding that knowledge is fundamental to policy making; collaborating with the private sector and other social partners to increase investment in research; enhancing capacities to conduct research with respect to the teaching-learning process in the Caribbean context and the needs of the labor market; and improving networking and linkages of Caribbean professionals nationally and regionally and with international institutions. Providing opportunities and strengthening the capacity of Caribbean people to absorb, adapt and utilize knowledge through:
- improving the mechanisms to effectively transmit and disseminate knowledge to facilitate greater knowledge acquisition, absorption, and generation. Through the cost–effective use of new technologies, increasing the use of the media for educational purposes, increasing the availability of computers, and training of teachers to more effectively use computers as a teaching tool not only for knowledge transmission but to motivate learning, linking tertiary level institutions within the region and to similar institutions globally, and redesigning curricula and programs to enable multi-disciplinary teaching and learning[5]; and

B. Making the School the Focus of the Learning Community

At the center of knowledge acquisition, absorption, and transmission is the School. There will be need to:

- re-conceptualize the management, infrastructure and human resources of the School to serve as a learning center for the community, emphasizing optimum utilization of the school plant for educational and cultural purposes; reform governance to give the school greater autonomy in prescribed areas and commensurate with the capacities within each school, promote school; broaden the skills base to promote mastery in core areas such as literacy, science, technology, mathematics, foreign languages, communication skills; with emphasis on the development of critical thinking skills at all levels;

[5] The University of the West Indies Distance Teaching Enterprise (UWIDITE) provides an example of a modern measure to improve knowledge transmission across the region. This needs to be strengthened not only in terms of the technology but also especially in terms of the student support services, program development, and teacher- training.

- focus on improved quality and effectiveness at each school, and establish measures for regular assessment;
- revitalize the organizational climate to emphasize partnership among parents, teachers, children and adult learners, analyze and monitor more carefully the learning outcomes, improve accountability, and further professionalize the teaching service;
- increase access at those levels where universal access has not been achieved. In most countries it would be at the pre-school and secondary levels;
- provide parenting education and training so parents might better prepare their children for formal learning, and promote voluntarism among parents and the community[6];
- strengthen curricular offerings in the areas of music, arts and crafts, and sports, and promote these areas as valued career options; and ensure that literacy, the sciences, technology, mathematics, foreign languages, and communication skills are provided as foundation courses. This implies developing creative ways to engage all students[7]; and
- anchor Caribbean children in the cultural traditions of the region, and build self-esteem through the appreciation of national and regional religious and social festivals, literary works, art improving the mechanisms to effectively transmit and disseminate knowledge.

C. **Reducing Inequities in the School Systems**

There is need to:

- ensure that budgetary allocations are equitable on a per capita basis among schools and provide the necessary support to disadvantaged schools; evaluate initiatives being undertaken to assist the lower socio-economic groups (school meals, uniforms, book grants, tutoring curricula enhancement are all mechanisms being attempted). Initiatives such as the Insurance Companies of the West Indies (ICWI) supported Science Learning Center and the Infodev Project, supported by the Jamaica Computer Society Education Foundation, are useful examples of private sector involvement;
- systematically identify the various groups, and analyze the factors which contribute to poor performance;
- sensitize administrators, teachers, and counselors to the issues of inequity and liaise with other social institutions to combat the problems of poor attendance, malnutrition, inappropriate home environments, and disabilities such as hearing and vision;
- expand and enhance programs for the disabled to enable them to benefit from opportunities at all levels;
- provide high quality pre-school education to lower socio-economic groups, and parental education on child development; and
- develop creative compensatory programs which give emphasis to strengthening reading and numeracy skills and promote the involvement of parents, and volunteers. Consideration will need to be given to after school and summer programs with assistance from the private sector.

[6] St. Lucia has initiated a program whereby each parent is requested to give one day per year to the school and may participate in academic activities, maintenance of property etc

[7] The Science Matters in Life Everyday (SMILE) project where pre-school children are introduced to the world of science, is an example of the approach advocated.

D. Strengthening Regional Cooperation for Global Competitiveness and a Goal of Educational Reform

Regional cooperation is deemed essential for the achievement of economic competitiveness. There are various mechanisms already in place. They do not, however, all operate effectively. The promotion of the knowledge, skills, and attitudes appropriate for regional integration must , therefore, be a major goal of the education system. Furthermore, the exigencies of size make collaboration mandatory if the ambitious educational objectives are to be realized. The region must:

- strengthen programs aimed at inculcating the knowledge, attitudes and values associated with regional integration;
- assess regional networks, mechanisms, and institutions such as UWI, CXC, Association of Caribbean Tertiary Level Institutions (ACTI), and strengthen and modify as appropriate to provide the required support to the member states;
- networking of Ministries of Education, regional institutions, and knowledge management initiatives;
- establish a system for the use of master instructors in core subject areas using audio-visual and computer aided instructional materials; and
- create and expand teacher and student exchange schemes and promote virtual school communities across the region.

E. Improving Education Financing and Management

All countries must focus attention on mechanisms to:

- enhance the efficiency and effectiveness of education financing through a modernization of financial management, and training of staff at school, district and ministry level to understand more fully the financial implications of education and the importance of accountability, and institute more competitive procurement practices for sourcing technical services, goods and supplies;
- evaluate their levels of investment relative to needs, re-examine the internal allocation of funding and redistribute resources as is feasible to achieve a better balance between personal emoluments and other components, ensure equity in financing among schools;
- increase user fees at the tertiary level with the necessary support to meet the needs of the lower socioeconomic groups. Student loans, and grant schemes tailored to meet local conditions can be increased[8];
- attracting greater financial and technical support based on sound policy analysis and planning; and
- enhance collaboration with multi-lateral and bilateral agencies, the private sector, and communities to support education reform initiatives, and strengthen capacities to negotiate with international agencies.

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[8] Given the high cost of tertiary level education relative to primary and secondary level, and the fact that private returns to tertiary education exceed social returns, governments need to implement cost sharing mechanisms with safety nets to allow for equitable participation. This position was endorsed at the recent UNESCO, Education For All meeting in Dakar, April 2000.

Caribbean Education Strategy Matrix

Developmental Objectives: An internationally competitive labor force and more effective and equitable education systems			
Key Strategies	**Processes/Activities**	**Outcomes**	**Indicators**
Narrowing the knowledge gap	• Universalize secondary education and improve completion rates for school age and out of school populations • Diversify tertiary level programs to meet market needs • Institute innovative measures to increase tertiary level participation and completion, including distance learning technologies, cooperative programs, student exchange etc. • Establish international standards for measuring the attainment of knowledge and skills • Establish measures to enhance research capacities- twinning arrangements, exchanges etc	• Diversified and flexible secondary and tertiary education delivery systems which provide various pathways to obtain required knowledge, skills and certification • Increase in the pool of persons with internationally acceptable skills • Greater knowledge available of key issues in education and major productive sectors..	• By 2020, a minimum of 60% of population possess upper secondary skills or higher • By 2020, the Region will have a 30% increase in persons with qualifications in science and technology at the post secondary level • By 2002 Caribbean Region will begin participation in IALS, PISA, and similar international surveys • By 2010 research output in key sectors including education increased by 30% • 30% of population have a working knowledge of at least one foreign language
Making the school and the classroom the center of focus of the education system.	• Prepare and implement individual school development plans based on identified needs • Enhance the capacity of all principals and teachers to effectively manage the schools. • Allocate resources to schools in accordance with identified needs • Establish minimum standards for the effective delivery of education from pre-school to tertiary level	• Qualitative improvements in student performance at all schools in accordance with agreed targets • More efficient management of educational institutions at all levels and increased capacity to develop and implement reform measures	• By 2005, 30% increase in number of students attaining 5 CXC or equivalent passes in core subject areas • School plans, targets, performance data, quantitative and qualitative- available to the public • By 2010, 100% of all teachers and principals qualified and trained to implement reform programs; • By 2005, in-service programs for regular upgrade of teachers and principals developed and commenced implementation
Reducing inequities in the school system	• Ensure equitable distribution of educational resources, and provision for special needs based on established regional standards • Develop and implement compensatory	• All schools have at least the minimum resources required in accordance with standards established	• Analysis of Per capita distribution of resources to schools within each country • By 2005, 50% decrease in attrition of students from lower socio-economic groups • By 2005, opportunities for pre-school education made available to all

Developmental Objectives: An internationally competitive labor force and more effective and equitable education systems			
Key Strategies	**Processes/Activities**	**Outcomes**	**Indicators**
	education, programs which emphasize the early acquisition of literacy skills, and the retention of poor students in school • Increase opportunities for students from lower socio-economic backgrounds to access tertiary and higher education	• Increased percentage of children from lower socio-economic groups, and males successfully complete secondary and post secondary education	children in lower-socio-economic groups • By 2010, 50% increase in completion of secondary level education of children at risk, including male students • By 2020, 30% increase in enrolment of students from lower socio-economic groups at post-secondary level
Strengthening regional collaboration	• Document and disseminate information on available educational resources including regional expertise within and outside the Region • Enhance distance education methodologies	• Regional expertise (resident and non-resident)deployed to accelerate reform efforts • Educational resources shared across the Region	• By 2005, Caribbean TV channels and web sites provide opportunities for interactive programs on educational issues, and sharing of resources • By 2005 Virtual Caribbean Institute for Educational Research and Planning in operation • 50% increase in programs for the promotion of Caribbean integration implemented by 2010
Enhancing educational financing	• Strengthen the capacities within the entire education system from central level to the school, to conduct financial analyses, develop cost effective programs and manage the systems more efficiently. • Allocate more resources to the sector through mobilization of resources from private sector partnerships, and support from the international community • Develop a culture of accountability from Ministry to classroom level.	• More efficient use of available resources • Links established between educational institutions and private sector • Greater financial resources made available to the sector from diversified sources	• Policies and practices regarding financial management in accordance with reform targets • Multilateral, bilateral and local contributions • Financial records from Ministries indicate equitable and efficient distribution and use of resources • Each Ministry has staff fully trained in financial management

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I. INTRODUCTION

"The fundamental cure for poverty is not money but knowledge"
Sir W. Arthur Lewis
Nobel Laureate Economics

Background and Justification

1.01 At the dawn of the twenty–first century, as the primarily fledgling states of the Caribbean Region struggle to forge a common identity, they face the complex task of reconstruction: a challenge occasioned by the need to significantly re-order its international economic arrangements in response to the monumental and continuing changes in the global marketplace. In 1999, the Prime Minister of Barbados cautioned that the year 2005 represents "*the Caribbean's date with a new economic destiny*" when The North America Free Trade Area (NAFTA) will take effect, and new trade arrangements with the European Union will be phased in. Drastic adjustments on an unprecedented scale at all levels are portended. New institutional arrangements to build capacity and support a more diversified export driven competitive economy, and appropriate infrastructure are among the imperatives. There is also need to carefully analyze the social transformations that are occurring, and take measures to address those issues with the potential to further exacerbate societal problems such as: the imbalance in the access of different socio-economic and cultural groups to technological resources such as the Internet; the considerable increase in the labor force with low prospects for employment; disparities in gender participation and achievement in the education process; changing family structures, erosion of traditional cultural values and the adoption of negative behavior patterns among youth - all of which have implications for reform of the education systems.

1.02 Caribbean governments and people are therefore in the process of determining the requirements for reconstruction and revitalization in this new, dynamic environment, and taking stock of its capacity to cope with the imminent changes. They are recognizing their relatively limited state of preparedness to address the range and complexity of international issues, and compete in an arena where the industrialized world has distinct advantages, in terms of their human, technological and information resources, as well as mechanisms for economic co-operation.

1.03 Over the past two decades, industrialized and developing countries alike have stressed the need for a more highly educated, creative, skilled and flexible labor force to address the new demands. They have been systematically assessing their education systems relative to the requirements of the knowledge based global economy, and instituting the necessary reform measures[9]. A major challenge for the Region is to provide internationally acceptable levels of education and training to enable them to compete in the global arena. Countries must therefore improve the effectiveness and efficiency of their education systems, capitalize on, and contribute to global knowledge, harness technological resources, and adopt appropriate strategies for regional and international co-operation to rapidly promote a culture of learning in the societies. Yet Caribbean people want their educational institutions to go beyond the goals of achieving economic competitiveness and knowledge generation. The promotion of individual and societal development consistent with the mores and values of the Caribbean Region is deemed to be of

[9] Among the more well-known international assessments and reform strategies are The United States of America (USA) Department of Education's National Commission on Excellence in Education report "A Nation at Risk" (1983), Goals 2000 Educate America Act (1994); New Zealand Education Reform Act (1989; Ministry of Education, Science, Sports and Culture (MONBUSHI), "The model for Japanese Education in the perspective of the 21st century" and the Organization for Economic Co-operation and Development (OECD) "Overcoming Failure at School" (1998)

Towards the Formulation of a Regional Education Strategy

Defining the Caribbean

1.04 The Caribbean Region as defined here consists of the member countries of the CGCED, with the English-speaking CARICOM sharing a common history and culture, while the Dominican Republic (Spanish- speaking), Haiti (French and Creole speaking) and Suriname (Dutch and Papiamento-speaking) have different traditions and languages[10]. Nonetheless, particularly over the past decade, the Region has been taking steps to bridge the differences, and highlight the commonalties. External factors such as the dissolution of the Soviet Union, the creation of NAFTA, the impending loss of preferential market access; recognition of the constraints inherent in being small economies in an international marketplace characterised by integration; and a growing awareness of a common cultural identity even across linguistic barriers have served to promote a desire for the widening and deepening of Caribbean integration.

1.05 Among the proposals for furthering the integration process is "*the establishment of a single market for human resources*" involving the free movement of professional and skilled people, and built on the pooling of educational and research capabilities, common and joint projects, and common policies towards the sourcing of extra - regional knowledge and skills[11]. Regionalism is therefore both an objective of the education process and a strategy and resource for educational development in the Region.

1.06 Notwithstanding these aims, and the common characteristics of smallness and vulnerability, the task of formulating a Caribbean Regional Education Strategy is a formidable one for several reasons inter alia:

- the diversity within and among the countries;
- the fact that education systems in the Region do not fit neatly into the mould of education systems in other developing countries with similar Gross National Product (GNP);
- the relatively limited policy analysis of issues specific to small-island states like the Caribbean; and
- the perennial issue of affordability in the face of considerable need.

1.07 First, with respect to diversity, the countries are geographically dispersed, at varying stages of economic and political maturity, with education systems at different levels, and which are still grappling with the challenge of establishing and sustaining mechanisms for effective co-operation on socio-economic matters. In terms of size, they range from Guyana on the mainland of South America with 215,000 square kilometers (sq. km.) to Anguilla with an area of 91 sq. km. Economic diversity ranges from the petroleum based economy of Trinidad and Tobago to tourism and services in Antigua, and heavy reliance on bananas in the OECS. In terms of the ranking of these countries on the Human Development Index, they run the gamut. Barbados, the Bahamas and Antigua and Barbuda are ranked amongst the countries with high human development, the other countries, (with the exception of Haiti, which is amongst the least developed in the world), are at a medium level. Second, because of the relatively high ranking of the majority of Caribbean countries in terms of educational achievement, when various policy recommendations for developing countries are analyzed there appears to be little applicability. Third, the in-depth

[10] Member countries are: Anguilla, Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Surinname, Trinidad and Tobago, Turks and Caicos Islands. Cuba is not a member of the CGCED but is mentioned for comparative purposes.

[11] Time for Action: The Report of the West Indian Commission, 1992.

analyses of thorny issues in small countries relative to quality and equity, low performance, low cohort survival at the secondary level, and other symptoms of inefficiency, and which are necessary to inform policy decisions are not systematically carried out - in part due to limited national and Regional capacity, as well as inadequate appreciation for educational research to inform policy formulation. Fourth, and perhaps ultimately the most critical challenge, is to identify the means to finance those measures considered to be essential for the realization of the agreed educational objectives, in the context of a debt-ridden Caribbean.

Assumptions

1.08 There are certain basic assumptions which undergird the proposals put forth, namely that:

- poverty reduction is a major component of the human development goals for all Caribbean countries, and education is an important vehicle to achieving this; therefore governments will make every effort to ensure that educational investment and services contribute to poverty reduction and do not exacerbate widening disparities;
- in the next two decades and beyond, Caribbean countries, based on parallel macro-economic reform, will realize economic growth which would translate into greater prospects for employment and higher standards of living, thus the demand for education will continue and increase as the intended beneficiaries see the linkage between higher levels of education and improved standards of living;
- education reform will be undertaken as part of an integrated Human Resource Development (HRD) Strategy within the Region involving health and nutrition, human rights, employment creation, and the Labor Market Information Systems (LMIS), and
- international bodies, the private sector, and communities will intensify collaboration with governments in a spirit of partnership to institute educational reform aimed at improving learning outcomes.

Key Objectives

1.09 There are two equally important and inter-related dimensions to the educational reform proposed: the economic and the social. Particularly in the recent past, the tendency has been to emphasize economic goals; however, throughout the world, it is being recognized that continued failure to address the social goals is at a high economic and social price. There is need to prepare each person to contribute to and benefit from economic advances, and function as a responsible, productive citizen through inculcating ethical values, and fostering attitudes such as tolerance and co-operation. Without this dimension, the economic gains will be compromised by the escalation of anti-social behavior - violence in schools, family disintegration, and the other social ills apparent, to an alarming degree, even in the most economically advanced societies. It is noteworthy that the Japanese Ministry of Education, Science, Sports and Culture in 1997, in "The model for Japanese Education in the perspective of the 21st century" gives equal weight to the emotional development of the child as to developing cognitive skills. The Education Strategy emphasizes the importance of a holistic approach to the development of each individual, and is driven by the following imperatives – the pressing need to:

1. Equip Caribbean people with the knowledge and skills to compete and function effectively both within the regional context and in a global economy. It implies a renewed emphasis on quality and relevance inter alia:

- improved responsiveness by the Region's education systems to the changing knowledge and skill requirements for a modern international economy; including assimilation and adaptation of lessons of international experience to local contexts; providing relevant and varied programs for the acquisition of new knowledge, appropriate attitudes, values, and skills; constant upgrade and life-long learning to enable the Region's people to penetrate new markets, and maintain a competitive edge;
- exploring new information and communication methodologies, and identifying cost-effective methodologies to meet the diverse learning needs of a geographically dispersed people;
- a greater emphasis on educational attainment in relation to internationally established standards, and the means for improving effectiveness and transparency of the education systems; and
- focus on the current as well as the potential labor force thereby addressing the needs of both in school and out of school youth and adults.

2. Reduce the current inequities in the education system that reflect and perpetuate societal inequities. This would involve:

- improved mechanisms for early identification of individuals and groups at risk, and those with special needs; assessing coverage and performance;
- systematic analysis of the distribution of educational resources by socio-economic group and educational level; and
- a re-conceptualization of "access" to include greater emphasis on equity in provision, improved responsiveness to address special needs, and compensate for current qualitative gaps in services, and enhancement of opportunities for sustained participation and to benefit from those opportunities provided.

1.10 Strengthening regional integration and promotion of partnerships – nationally, regionally and internationally can be viewed both as a goal and a means to attain the afore-mentioned objectives. Some regions have taken two centuries to make the transition from agrarian-based economies to the global knowledge economy. The Caribbean Region, like many other developing countries, does not have the gift of time. With relatively limited resources, and constraints in terms of economies of scale, they are expected to rapidly develop the capabilities to transform their economies. The resources required are far beyond what are presently available. Another challenge is that of maintaining cultural identity and self esteem in a globalized environment. How does one promote regional identity, embrace global citizenship and earn international respect? There is an obvious need for greater understanding of the cultural heritage, achievements and innovations in the region. Governments therefore must:

- foster regional and international collaboration in addressing the educational priorities, including strengthening capacity in science and technology, research, policy analysis, planning; project preparation and financing the delivery of services;
- re-orient education systems towards promoting regional integration, and cooperation with the international community; and
- document and disseminate information on the cultural heritage, innovations and achievements of the Region globally.

The processes and activities associated with the attainment of these goals provide the

framework for the Regional Action Plan.

Limitations

1.11 This is a Regional Report with the inherent limitations of generalization in the midst of such diversity. The pernicious problem of inadequate and inconsistent statistical data posed difficulties for comparative analysis over time and among countries. Nonetheless, the data from the selected countries are sufficiently robust to provide useful insights and direction for all countries. The strategies proposed are based on policy issues of Regional importance, take into account current achievements, reforms underway, and factors which contribute to successful education systems; however, they are not intended to be blueprints for action by each country throughout the Region, since the starting point for each country varies. Also rapid and unpredictable changes globally make it virtually impossible to chart a course for education systems for twenty years hence. The fundamental message is that of building a strong foundation, and preparedness for change. In the final analysis, each country must focus on its own specific needs, and conduct detailed studies to design-country specific interventions, bearing in mind the various local contexts, the strengths of the systems, the requirements of the various target groups and the likely costs and benefits.

1.12 Chapter 2 analyses the challenges facing the education systems relative to the demands of operating within the global economy, and the opportunities for reform in the context of demographic and socio-economic developments. Chapter 3 outlines the way forward. A Vision for Caribbean Education is presented and strategies proposed to realize that Vision. These strategies are based on the major objectives and current level of development of the systems. Chapter 4 examines the externally financed interventions in the Region and provides recommendations for continued support.

II. ACHIEVEMENTS, CHALLENGES AND OPPORTUNITIES

2.01 The correlation between the educational attainment of a people and their productivity has been conclusively established. Moreover, the contribution of education to improved health and nutrition, social and political development is equally well known. This chapter analyses Caribbean education systems in relation to current demands and expectations and examines the prospects for meeting the challenges identified, in the socio-economic milieu within which the education systems operate, and against the backdrop of previous reform efforts.

2.02 The Caribbean has a long history of education. dating back to the sixteenth century when the University of Santo Domingo was set up in 1538. It was the first University established in the New World. Early childhood education, primary and secondary education were in operation by the middle of the nineteenth century, and by the end of the century more than half the population, in several countries, received a primary education although no more than two percent benefited from secondary education. As discussed below, despite its relatively early start, Caribbean education is yet to realize its promise.

2.03 The governance, management and structure of education systems in the region reveal marked differences. In several countries, for example, Belize, St Lucia and Suriname, the church state partnership still prevails although Governments have established Ministries of Education and pay most of the recurrent costs of schools. In Haiti, the private sector is the major provider of education at all levels: early childhood, primary, secondary and tertiary. The Government-run public system is a minor player in the provision of education opportunities. This is to be contrasted with countries such as Antigua and Barbuda, the Bahamas, Guyana and St Kitts/Nevis where government is not only the major provider but manages the education system directly through the Ministry of Education. At the other end of the spectrum in public education is Jamaica, where the public system is financed by the Government through the Ministry of Education, but each public education institution is managed by a Board of Directors.

2.04 Since these different patterns of governance and management have their roots in the legal framework mandating the provision of education in the different countries, stakeholder rights and obligations differ across the region. For example, in the Bahamas and St Kitts and Nevis the Ministry of Education can appoint principals and teachers to schools and transfer them from one school to the next. In Belize, however, it is the churches that appoint principals within guidelines prescribed by the Ministry of Education. In Jamaica, the Board nominates the principal and the Minister accepts or vetoes the nomination, but has no powers of nomination. These differences in governance and management are important considerations in policy formulation and planning because they define the context of implementation. and add complexity to what may appear to be a small and relatively homogenous region. Related to the range of patterns in governance and management is the fact that on almost every dimension on which education can be assessed, Caribbean countries will manifest a wide range of conditions on that continuum. Furthermore, the geography, macro-economic and language differences compound the challenges of formulating inclusive regional strategies.

Twentieth Century Achievements

2.05 A publication analyzing educational reforms in CARICOM countries in the second half of the twentieth century traces these to the political goals of nation building, democratization, the need to provide all nationals access to all levels of education, and promote national identity. Thus

began the expansion which has led to the attainment of universal primary education, enrolment of 80% of pre-primary age children, considerable increase in secondary education from a low of approximately 10% in 1950 to between 50 –100% in 1999 (eight countries provide universal secondary education), the creation of tertiary level institutions and universities, and equal access of both sexes at all levels. Some provision was also made for children with special disabilities. Effort has been made to reform curricula to reflect the peoples and cultures of the region. Regional assessment at the secondary level was introduced through the establishment of the Caribbean Examinations Council (CXC), and some attention has been given to training teachers and managers for the systems. Particularly in the past decade, more concerted effort has been made to introduce elements of modern management, for example, management information systems with improved data collection and analysis. Similar patterns of development have been pursued in Suriname and Dominican Republic. These achievements of the second half of the twentieth century were brought about through considerable financial investments; on average 4-5% of GDP, ranging from a low of 2% in the Dominican Republic to about 9% in Suriname; and some support from bilateral, multilateral and private sources.

Table 1
Education Indicators

Country	1999 Total Population	Education Expenditure (% of GNP)	Pre-primary Gross Enrollment	Net Primary Enrollment	Net Secondary Enrollment	% Cohort Survival to Grade 5
Anguilla	11,510	5.1*	92.7	98.9	N/A	94.0
Antigua & Barbuda	67,430	N/A	N/A	N/A	N/A	N/A
Bahamas	298,020	4.31	100.0	99.2	84.6	N/A
Barbados	266,680	7.50	70.2	100.0	98.0	94.0
Belize	241,750	5.01	N/A	85.0	63.6	72.0
British Virgin Islands	19,700	N/A	89.0	N/A	N/A	N/A
Cayman Islands	39,335	N/A	N/A	N/A	N/A	N/A
Cuba	11,150,000	10.00	98.0	94.0	69.9	94.5
Dominica	73,640	8.40	65.0	98.0	N/A	89.3
Dominican Republic	8,404,420	2.01	27.3	79.9	53.9	49.2
Grenada	97,000	4.70	N/A	N/A	N/A	N/A
Guyana	866,750	N/A	79.0	91.9	74.9	90.8
Haiti	7,700,830	1.46	N/A	66.3	20.9	32.0
Jamaica	2,652,443	7.6*	84.2	93.0	69.8	N/A
Montserrat	3,660	N/A	81.0	N/A	N/A	94.0
St. Kitts & Nevis	42,838	4.70	79.0	88.6	96.4	N/A
St. Lucia	160,880	7.20	78.3	98.0	65.9	94.8
St. Vincent & Grenadines	120,519	6.30	N/A	84.0	N/A	N/A
Suriname	431,156	3.50	N/A	N/A	42.8	N/A
Trinidad & Tobago	1,326,410	N/A	46.0***	73.1	71.5	98.2
Turks & Caicos	24,000	N/A	67.5	109.1****	97.0	94.0

* Public expenditure on education as % of GDP

** Literacy rate is 75.1%; semiliteracy 17.3%; absolute literacy 7.6%

***Enrollment rate is for 3-4 year olds only.

**** Net primary enrollment rate exceeds 100% because temporary migrants are not included in calculation student population.

Data Sources:

1. Education for All 2000. Country Reports.
2. *The State of the World's Children 2000*. UNICEF.
3. USAID GLOBAL EDUCATION DATABASE 1999.
4. World Bank EDSTATS, 2000.
5. World Bank World Development Report, 1999/2000.
6. World Bank Jamaica Secondary Education Report, 19069JM, 1999; Education For All 2000 country-provided data.
7. *Education Development Plan 2000-2005 and beyond*. Ministry of Education of St. Lucia. February 2000.
8. Waiser, M. 1998. "Early Childhood Care & Development Programs in Latin America: How much do they cost?" LCSHD Paper Series 19.
9. *The World Factbook*. Central Intelligence Agency. http://www.odci.gov/cia/publications/factbook/
10. Gasperini, L. 2000. "The Cuban Education System: Lessons and Dilemmas" LCSHD Paper Series 48.
11. World Bank. 1996.
12. *Haiti: Cost and Financing in Basic Education*. World Bank. 1999.

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The Unfinished Agenda

2.06 Notwithstanding these noteworthy strides, the goals of equity and equality of opportunity remain elusive, and there is concern regarding quality at all levels.

Access and Coverage

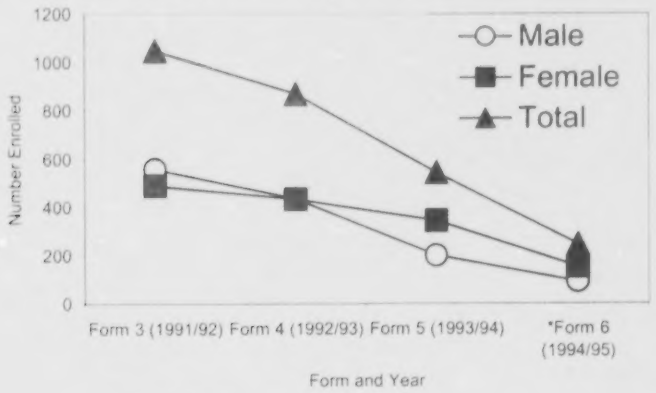
2.07 At the pre-primary level, countries need to reach those students, primarily from poorer communities, who do not now have access. For countries like Belize with 23% enrolment and Haiti (64%) this is a considerable challenge. With respect to primary education Haiti is yet to attain universal coverage, while for the rest of the countries the shortfall is primarily at the upper secondary level (beyond grade 9). Provision for children with disabilities is particularly inadequate beyond the primary level. Tertiary level education is embryonic in most countries: Enrolment, although increasing, is low with a regional average of 9%, ranging from less than 2% in the OECS to approximately 18% in the Dominican Republic, compared to a global average of 18%; and 10% in low and middle income countries. In other Latin American countries, the rate ranges from 10 to 25% and in the OECD countries the average enrolment rate is 51%. Opportunities for continuing education for out of school youth and adults remain limited, and participation rates mask the considerable disparities in access and quality, particularly at the secondary and tertiary levels.

Effectiveness

2.08 Increased access to secondary education and improved assessment have served to highlight the ineffectiveness of primary education as students enter secondary schools ill prepared to undertake studies at that level. Consistently, examination results in CARICOM countries point to deficiencies in the performance in core subjects such as English, mathematics and science, and high drop out rates beyond the age of compulsory education (age 15) reduces the efficiency to disconcerting proportions. The situation in St. Kitts and Nevis, a country where the transition rate from primary to secondary is close to 100%, is illustrative. Only 52% of students who entered secondary school in 1993/4 reached Form V (Grade 11). As shown in Figure 1, attrition of males is considerably higher than that of girls. This pattern of underachievement of males repeats itself throughout the Region, and has been the focus of recent studies[12]. Repetition rates are marked towards the end of the primary cycle and students struggle to attain the standard which would allow them to enter secondary school. A similar pattern exists at the secondary level, and is evident from an analysis of students writing the CXC examinations. In 1998, more than 82% of the school candidates were over 17 years old and 37% of these were 19 and over. This suggests that the transition from primary is at age 12 or over, rather than 11, and that more than one-third must repeat one year or more before attempting the examinations. Much of the generally unsatisfactory performance of both male and female students at the primary and secondary level alike, has been attributed to inadequacies in facilities, instructional materials, and inappropriate teaching methodologies.

[12] Gordon Harewood "Addressing the Underachievement of Males" analyses the situation in the region with special focus on Dominica, Grenada and St. Lucia.

Figure 1
Attrition at Secondary Schools by Gender in St. Kitts and Nevis



*Form 6 is a two-year program.
Source: Ministry of Education, St. Kitts and Nevis.

2.09 Importantly the capacity to manage the system, while improving, is deficient in critical areas such as policy analysis, planning, financial management, assessment and supervision. This is a major stumbling block towards the design, implementation and evaluation of education reform programs. The agenda for the past century is therefore unfinished.

The Challenges Ahead

2.10 The far reaching political, social, economic, demographic and technological changes of the latter part of the twentieth century and the projected developments particularly the globalization of markets, and continued advances in science and technology have signaled new demands which require corresponding changes in the preparation of the people of the Region. However, it would be remiss to merely identify what ought to be done without first analyzing the socio-economic and political contexts within which the reform agenda must be planned and implemented. The issues of access and equity, quality and relevance, and efficiency in the education systems cannot be viewed in isolation from the factors which impinge on the systems.

Size and Vulnerability

2.11 Caribbean countries are characterized by vulnerability, due in no small measure to the small size of their economies and inability to benefit from economies of scale, limited natural resources, the vagaries of international markets, as well as the frequent occurrence of natural disasters. With respect to the education systems, there is a need for administrative and teaching staff to be multifunctional, and there are limited curricular offerings particularly in the smaller countries at the secondary and post secondary levels due to small numbers of students. On the other hand, the small size of the education systems has the potential to make participation of stake-holders and dissemination of reform measures at the national level relatively easier Frequent hurricanes constantly erode investment in educational infrastructure, and Montserrat has suffered the disastrous effects of volcanic eruptions. Smallness and vulnerability also have a generally negative impact on the macroeconomic situation. Bearing in mind that sustainable economic growth is both a prerequisite for and a consequence of equitable social development, considerable attention needs to be given to the development and implementation of sound macroeconomic policies, appropriate integrated human resource development programs, and the

creation of an enabling environment to stimulate growth. To a large extent, the economic challenges are manifest as social problems, associated with poverty and which, in turn, have a negative effect on the pace of educational development.

The Economic Impact

2.12 In most of the CGCED member countries, growth has been sporadic over the past two decades. There are signs of progress in some countries, and the regional average of a little over 2% over the past decade is an improvement on the average of 1.2% experienced during the eighties, but this has been clearly insufficient to provide appropriate educational opportunities for all, generate adequate employment and reduce poverty. All countries are making attempts at economic diversification to find a niche to improve productivity. Tourism is a growing sector in several countries along with construction and offshore finance. According to a recent report, thus far attempts at diversification of the economy into manufacturing "*have not been signal successes*". This has been attributed to the small size of the population, labor force, and internal markets; lack of flexibility and deficiencies in the range and depth of skills required. What is abundantly clear is that regardless of the avenues pursued, vastly improved knowledge and skills will be critical variables in determining the economic future of the Region, and given the relatively limited resources available, efforts to realize greater efficiency must be redoubled to achieve the desired learning outcomes.

Table 2
GDP Per Capita Growth Rate, Selected Caribbean Countries

Country	1986-1998	1994-1998	1997-1998
Antigua & Barbuda	2.91	1.09	3.8
Barbados	1	3.42	4.2
Belize	4	0.8	2.8
Dominica	3.43	1.65	3.3
Dominican Republic	2.81	5.4	5.5
Grenada	3.38	3.54	4.5
Guyana	5.11	4.42	-1.9
Jamaica	0.52	-1.99	-1
St. Kitts & Nevis	6.95	4.33	3.6
St. Lucia	2.35	0.41	2.6
St. Vincent & Grenadines	5	3.47	5.4
Trinidad & Tobago	0.2	3.11	2.9

Sources: WB Staff estimates, IMF Staff estimates, Caribbean Development Bank, Social and Economic Indicators.

2.13 The current challenges within the education sector are in part a legacy of the economic difficulties the countries faced during the past two decades. During the 1980s and early 1990s, the larger CARICOM countries recorded low or negative growth. Jamaica, Guyana, Trinidad and Tobago, and Barbados have had considerable cuts in its fiscal operations. As shown in the Statistical Annex "Debt indicators for selected countries 1985-1997", during that period, at times, some of the larger CARICOM territories have had fifty percent or more of their current revenues preempted by debt service. Even in countries where the proportion allotted to public debt is considerably lower, it is higher than that going to education: for example, in 1999, 19% of Grenada's national budget went to education; however 20% was provided for public debt service. Nonetheless, several countries such as Barbados, Jamaica, and St. Vincent and the Grenadines have demonstrated and maintained a strong commitment to education as evidenced in their

relatively high allocation of public funds to education (more than 6% GNP). The struggle has not only been about inadequate resources but also the utilization of these limited resources to further the goals of equity.

2.14 An Inter-American Development Bank (IDB) study on The Debt Crisis and Caribbean Education at the beginning of the 1990s, as well as the World Bank report on Caribbean Education (1992) highlighted the negative impact in this regard just at a time when all governments, apart from Haiti, having attained universal primary education, were attempting to increase access to secondary, pre-primary education and tertiary education; to institute measures to address issues of inequity, and improve quality in the systems. Consequences have included the reduction of government assistance to pupils for the purchase of textbooks, cutbacks in funding for school meals, inadequacies in funding for teaching and learning materials, reduction in capital projects for school construction, repairs and refurbishing, and importantly inadequate attention to building capacity to manage the system. Furthermore, plans to address fundamental problems such as the disparities in secondary school enrollment, continue to be delayed. Conditions varied from country to country but were especially marked in Guyana, Jamaica, Trinidad and Tobago. Guyana's situation was (and continues to be) particularly acute leading to the emigration of a large number of qualified and trained teachers and very low performance and high attrition of students. In Haiti, prolonged political upheavals exacerbated the weak economic base, and together contribute to placing the education system amongst the least developed in the world.

Inequities

2.15 Despite efforts to promote educational development, the poorest communities continue to be most neglected. This is in part due to failure to adequately collect relevant data, analyze intra-sectoral allocations, and institute appropriate measures to address the inequalities which are evident in the education system in the form of stratification of schools and considerable variability of inputs correlated with geographical and socio-economic factors. In several CARICOM countries, the divide is marked at the secondary level where there has been the tendency to locate schools primarily in the urban and semi-urban areas, and in the case of scattered island states such as The Bahamas, and Turks and Caicos Islands, it is not considered cost-effective to establish secondary schools in the more far-flung islands with low population. In Dominican Republic, approximately 75% of the limited education budget is spent in the urban areas where one-third of the population resides. In Haiti, 80%, goes to the urban areas although only 30% of the population live there.

2.16 The disparities although evident at all levels become deeper and wider at each successive level. At the pre-school level, where there is substantial private sector participation, schools in poorer communities have the least resources. At the primary level, in some countries, the tendency is for the richer echelons to attend private schools which are deemed to be of better quality than some of the public schools. The poorest quintiles do benefit from public expenditure at this level; however, the most remote schools are generally under-supplied in terms of teachers and instructional materials.

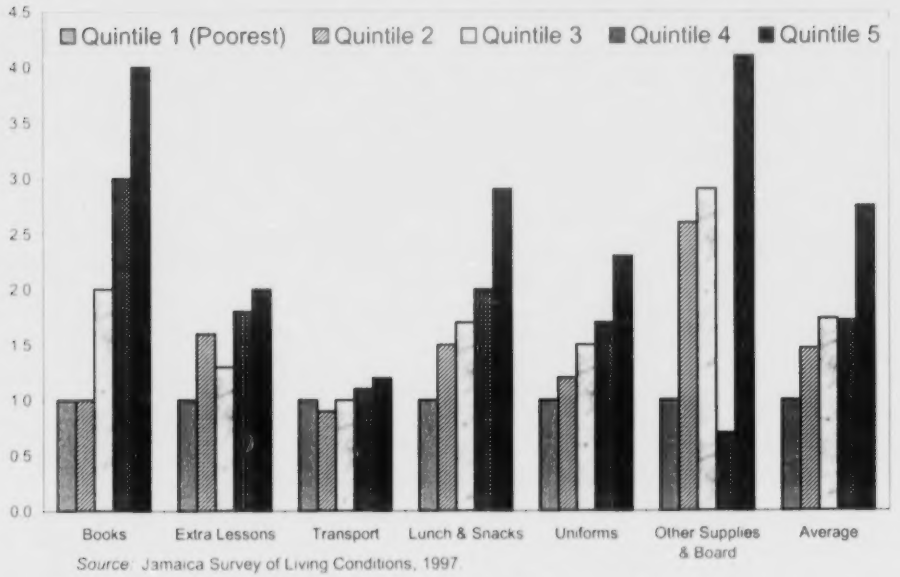
Table 3
Quintile Share of Beneficiaries of Public Spending on Education

Country	Education Sub-category	Quintiles				
		1	2	3	4	5
Trinidad and Tobago (1992)	Primary	30.9	24.0	22.2	15.6	7.3
	Junior Secondary	29.1	23.3	22.4	19.3	5.8
	Secondary	17.7	19.6	27.5	20.4	14.9
	University/Technical	4.1	9.3	13.6	36.3	36.7
	School Feeding	43.1	27.3	15.2	10.6	3.8
	Free Textbooks	19.6	13.6	17.4	27.4	21.9
St. Lucia (1995)	Public Primary Schools	26.7	23.6	19.8	19.2	10.6
	Public Secondary Schools	16.9	22.0	30.7	19.2	11.2
	Free Meals at School	17.4	24.3	47.9	5.5	4.9
	Free Textbooks	20.6	14.0	21.9	13.3	30.4
Jamaica (1998)	Early Childhood	26.0	23.0	22.0	18.0	11.0
	Primary	25.0	24.0	21.0	19.0	12.0
	Secondary	16.0	21.0	22.0	22.0	19.0
	Tertiary	3.0	11.0	8.0	24.0	54.0
Guyana (1992)	Primary	28.9	24.9	18.5	19.0	8.6
	Secondary	15.7	24.0	22.0	23.5	14.8
	Post-Secondary	7.7	12.5	28.0	19.4	32.5
	Meals at School	23.4	27.1	19.7	21.0	8.8
	Free Textbooks	25.6	24.5	22.9	16.4	10.7

Sources: Poverty Reduction and Human Resource Development in the Caribbean, World Bank, 1996; Jamaica Secondary Education Report, 19069JM, World Bank, 1999.

2.17 Constraints in the economy have served to exacerbate an already unacceptable situation. Schools in some countries are compelled to raise funds for essentials – books, supplies, utilities, equipment, sports etc from among the beneficiaries. This is particularly onerous for poor families, and serves to widen the gap between schools in affluent communities and those in poor neighborhoods. An analysis of annual expenditure of school and school related items undertaken in Jamaica, shows that at the primary level, the richest quintile can spend 2.8 times more than the poor, and in the case of books spends four times as much.

Figure 2
Expenditure on School and School Related Items
by Consumption Quintile, Jamaica 1997



Source: Jamaica Survey of Living Conditions, 1997.

Source: Jamaica Survey of Living Conditions, 1997.

2.18 Stratification is most pronounced at the secondary level. For example, in Jamaica, there are 6 types of secondary schools – all age, new secondary, secondary high, comprehensive, technical high, and vocational/agricultural with great variation in the quality and quantity of resources. The poor tend to be concentrated in the all age and new secondary schools where resources are poorest. Approximately 10% of the children in the lowest percentile are admitted to the secondary high schools whereas 47% of children in the highest quintile are enrolled in these better-resourced schools. Table 4 shows the disparity in expenditure among the different types of secondary schools.

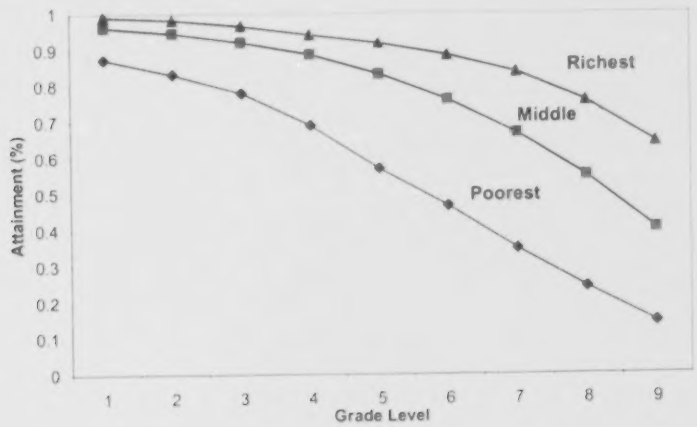
Table 4
Per Capita Expenditure by School Type, Jamaica, 1995/96 and 1996/97

School Type	Instruction Materials	Materials & Equipment	Minor Repairs	Public Utilities	Other	Total
New Secondary	305	187	142	72	140	846
Comprehensive High	293	138	143	89	317	980
Secondary High	371	250	360	153	581	1715
Technical High	470	141	200	198	699	1708
Vocational/Agricultural	416	500	425	155	4505	6001
Average, All Schools	371	243	254	133	1248	2250

Source: Jamaica Ministry of Education and Culture, 1997.

2.19 In general, the poor do not survive the current process of schooling and are therefore less represented the higher the level of education. Figure 3 shows the higher attrition of poor students in the Dominican Republic. A World Bank document, "Poverty Reduction and Human Resource Development in the Caribbean" pointed out that in 1992 the richest 40% in Trinidad and Tobago received 73% of the benefits of public expenditure at the post-secondary level, and the lowest 40% had 13%, while in Guyana the lowest 40% received 20% of the available funds.

Figure 3
School Retention by Income Group, Dominican Republic 1996



Source: Filmer, Pritchett and Tan, 1998.

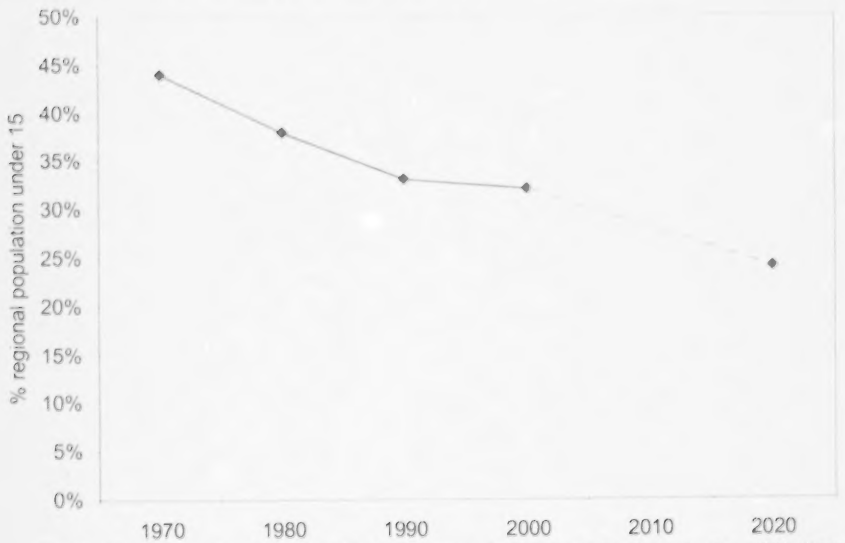
The Demographic Impact

Declining School-Age Population

2.20 Age structure, the population growth rate, societal expectations and legal school age are key factors when considering future educational requirements, in particular access. The percentage of population in the age group 0–14, in selected countries in 1990, was on average 33, with a low of 24.7% in Barbados and a high of 46% in Belize; and approximately 60% in the

economically productive age group 15-64. The corresponding figures for developed countries are on average 25% and 65% respectively. While statistics for the Caribbean are still relatively high they indicate a steady decline in the population under age 15, moving from approximately 44% in 1970, to 38% in 1980, 33% in 1990, and projected to be 24% by 2020 (See Fig. 4). The decline is primarily due to falling birthrates. This scenario presents opportunities for those countries which have already attained universal primary education to focus more readily on expanding secondary education and much needed qualitative improvements, expand and improve early child-hood education. Countries like Guyana and Haiti where the crude birth rate (per 1,000) are 29.8 (1995) and 31.9 (1998) respectively will continue to face difficulties in providing pre-primary and primary services. The other countries are below 25, with Trinidad and Tobago at 13.3 (1997) and Barbados 14.3 (1997).

Figure 4
Declining Population, 0-15 Age Group
as Percentage of Total in the Caribbean, 1970-2020



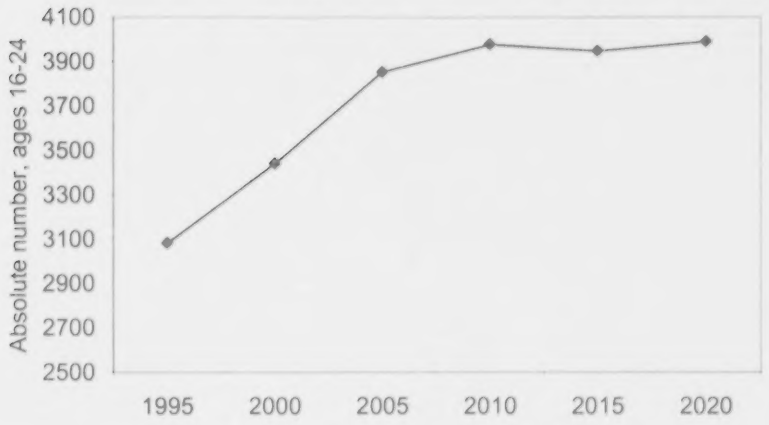
Source: Official estimates, UN ECLAC/CELADE estimates, UN Population Division estimates, 1999, World Bank estimates, 2000.
Data for: Bahamas, Barbados, Belize, Dominican Republic, Guyana, Haiti, Jamaica, Trinidad & Tobago.

Increasing Youth and Labor Force

2.21 An analysis of projections of the 5-14 and 15-19 year age groups shows that in the period 2000 – 2010, only Haiti and Belize are expected to have increases in the 5-14 age group. In the 15-19 age group, expansion is projected in the Dominican Republic, Haiti, Trinidad and Tobago, the Bahamas, Belize and Suriname. Thus the pressure to provide places at the secondary level, and, at the same time, improve quality will continue unabated in those countries. The size of the population 16 and over is projected to continue to increase ranging from 12% in Barbados to 119% in Belize (See Figure 5). This situation poses enormous challenges, for the Region, first, in terms of provision of post-secondary level education and training and continuing education to ensure the competitiveness of the working population, and second, with respect to employment generation.

Figure 5

Number of Youth Ages 16-24 in the Caribbean, 1995-2010



Source: Official estimates, UN ECLAC/CELADE estimates, UN Population Division estimates, 1999, World Bank estimates, 2000.
Data for: Bahamas, Barbados, Belize, Dominican Republic, Guyana, Haiti, Jamaica, Trinidad &

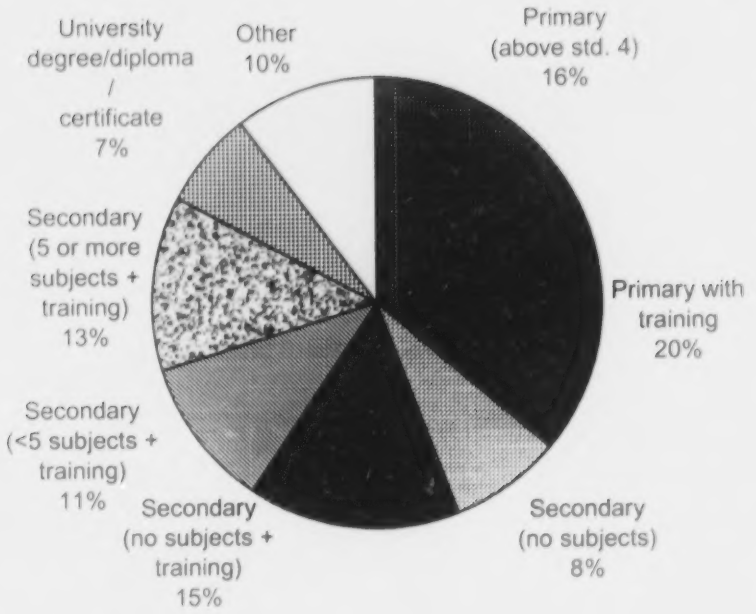
The Challenge of Competitiveness

Low Achievement

2.22 Across the Region, literacy rates are relatively high (on average 85%), except for Haiti with a literacy rate of 40%; however, this attainment is insufficient to compete in the global market place. Secondary completion is considered a minimum requirement for development of a modern economy. Current participation rates at upper secondary level (grades 9-12) range from 50- 100% (Haiti's is approximately 23%); however, less than 30% of the labor force, (compared with 70% in OECD countries) have adequate secondary level qualifications to enable them to gain admission to a tertiary level institution or undertake employment where such qualifications are required.[13] Figure 6, based on data from the International Labor Organization (ILO), shows the educational attainment of the labor force in Trinidad and Tobago and serves to underscore the issue of low achievement that obtains in all the education systems. Apart from the 7% with university level education, approximately 50% of the labor force reported having secondary education. Yet only 14% actually possess the certification to gain entry to tertiary level institutions. Barbados reported as having 61% with secondary education and Guyana 30% but failed to indicate the specific levels of attainment. Like Trinidad, the percentage of completion with certification is estimated to be considerably lower. Figure 7 illustrates that with 9% enrollment at the tertiary level, the Region is somewhat below the average for middle low and middle income countries, as well as Cuba which has an enrollment of 13%.

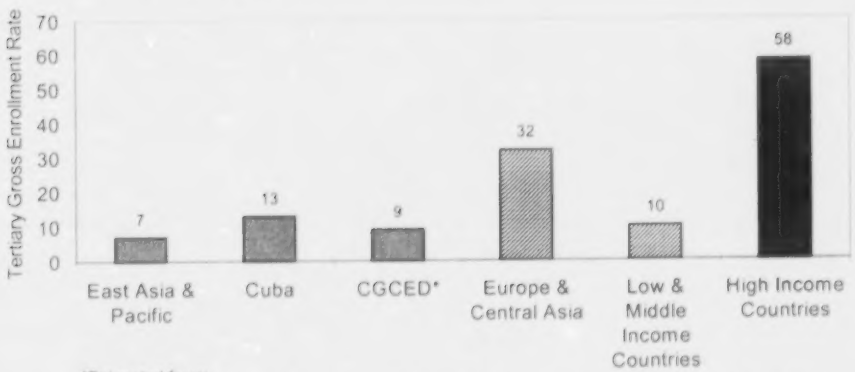
Figure 6
Educational attainment of Labor Force: Trinidad and Tobago, 1996

[13] For the purposes of this report a minimum of 4 or five subjects at the CXC level is considered successful completion. If one were to use the criterion of completion of Form V, regardless of performance at CXC the percentages would increase significantly as illustrated. The criteria used in the OECD countries is unclear.


University degree/diploma / certificate 7%
Other 10%
Primary (above std. 4) 16%
Secondary (5 or more subjects + training) 13%
Primary with training 20%
Secondary (<5 subjects + training) 11%
Secondary (no subjects + training) 15%
Secondary (no subjects) 8%

Source: ILO, 2000.

Figure 7
Tertiary Level Enrollment : Regional Comparisons



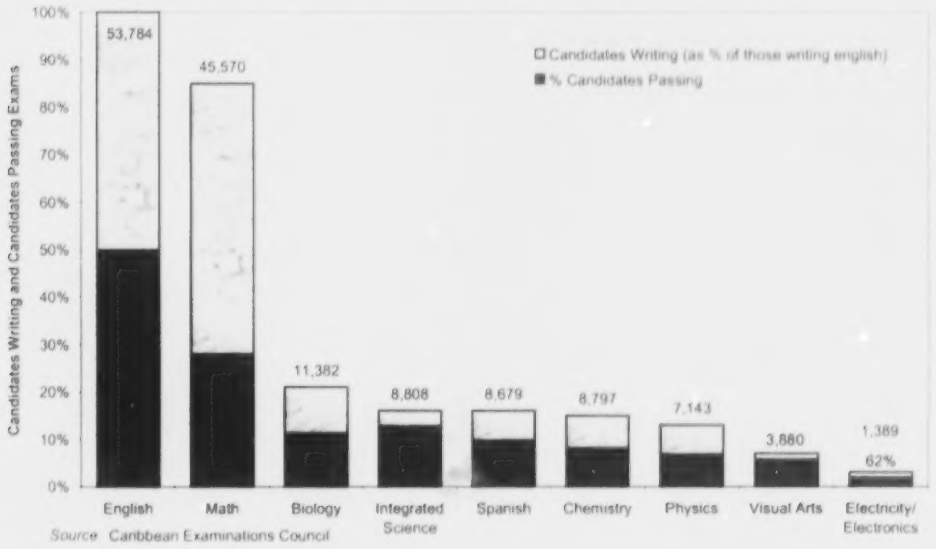
*Estimated figure

Source: Higher Education in Developing Countries: Peril and Promise, The Task Force on Higher Education and Society, World Bank, 2000

2.23 An internationally competitive labor force would be required to demonstrate competencies in areas such as mathematics, sciences, technology and foreign languages. There are severe shortcomings in all of these areas. An analysis of students writing the Caribbean Secondary Education Certificate in 1998 shows that less than 20% took science subjects, fewer than 15% foreign languages, and 7% information technology. Only one third of those writing mathematics obtained a passing grade, while 50% passed English Language. Furthermore,

technical and vocational subjects are still considered marginal and best suited to those who lack academic ability.

Figure 8
Caribbean Secondary Education Certificate 1998: Performance of School Candidates in Selected Subjects at General/Technical Proficiency Level



Source: Caribbean Examinations Council

2.24 Besides the inadequacies in cognitive skills of the working population, a recent UNIDO report identified attitudinal and communication deficiencies in employees in the industrial sector, thus reflecting further shortcomings in their preparation at the secondary and post-secondary levels[14]. When one considers that just about 50% of the secondary intake in the CARICOM countries attempt CXC examinations, and this in turn is a mere 25 - 30% of the age cohort, it is evident that substantial resources must be marshaled to increase the output of the education systems and improve the level of competitiveness of the present labor force. There is also relatively limited capacity for research. At the tertiary level, the focus is on teaching and little effort is made to teach research skills. At the universities there is greater opportunity to acquire these skills; however, there is considerable variability from one department to another and research is generally not given the priority nor resources required.

Addressing Unemployment

2.25 The economic situation in several countries over the past two decades has not permitted the requisite employment generation to curtail unemployment and under employment, and to absorb the growing number of job-seekers, the majority of whom, as noted above, are under-prepared for the job market. Currently, unemployment is high in most countries (20%) and particularly so among youth under 30, where it is approximately 30%. The Bahamas, British Virgin Islands, Anguilla are among the countries with low unemployment. Increasing juvenile delinquency and crime are deemed to be some of the consequences of chronic unemployment. In

[14] : D. Bhajan et al. Report on Preparatory Assistance for Strengthening of Training Capability of the Caribbean Sub-Region for Human Resources Development, UNIDO

addition, low prospects for employment pose the threat of reducing demand for education. Efforts to address the situation must be tailored to the magnitude of the problem. "The Caribbean Vision 2020: A Regional Perspective on Development Challenges, Opportunities and Strategies for the next two decades" estimates that Haiti will require GDP growth at a rate of at least 5.5% to absorb the additional 2 million to the labor force, whereas Barbados will need to grow at a rate of 2.35% to absorb the additional 9,000 in its labor force (See Table 5). Skills training, both technical and social, and continuing education programs for out of school youth and adults are critical for addressing the unemployment and under employment problems, and stemming the social malaise associated with poverty. These education and training programs should prepare persons for self-employment as well as prospective opportunities in the labor market.

Table 5
Unemployment, Labor Force Growth, Required GDP Growth

Country	Average Annual Growth in Labor Force	Minimum Required Annual GDP Growth
Bahamas	1.5	3.5
Barbados	0.4	2.4
Belize	2.9	4.9
Cuba	0.9	2.9
Dominican Republic	1.8	3.8
Guyana	0.6	2.6
Haiti	3.5	5.5
Jamaica	1.5	3.5
OECS	0.9	2.9
Suriname	1.4	3.4
Trinidad & Tobago	0.9	2.9
Total (Country Average)	1.5	3.5

Source: Vision 2020, World Bank, 2000

The Brain Drain

2.26 Another demographic factor with implications for the economy and education, specifically the financing of education, is emigration. A World Bank report, Access, Quality and Efficiency in Caribbean Education: A Regional Study, commented on the high level of emigration of professional, technical, and skilled workers out of the Region. The report further noted that "many countries are not reaping the full benefits of their social investment in education". These persons are not available to contribute directly to the growth of the society and economy, although remittances by the overseas population are reportedly quite high for some countries. Simmons and Plaza (1991) showed that Caribbean nationals migrating to North America over the decades of the 1970s and 1980s had higher levels of education than the average for the population in their homelands. For example, during the period, of the adult immigrants in the United States from Barbados 37.5% of females and 29.8% of the males had university education compared with 2% females and 3.8% males in the country of origin. The pattern was much the same for the rest of the region.(See statistical annex). Although there has been an increase in the percentage of persons with university education within the Region, particularly in the campus countries- Jamaica, Trinidad and Tobago and Barbados- the migration of persons with higher levels of education and skills who have benefited from public investment, persists.

Intra Caribbean Migration: The Complexity of Language

2.27 There is considerable intra Caribbean migration which is also having an impact on the education systems. Spanish is the mother tongue for a number of students in some of the Leeward Islands and Belize, as a result of inflows from Dominican Republic in the case of the Leeward Islands, and Guatemala and Mexico in the case of Belize. Creole and French –speaking children are to be found in countries like the Turks and Caicos Islands, and Cayman Islands in sufficient numbers to pose a challenge to the small systems. This places center-fold the issue of language of instruction at the pre-primary and primary levels. Creole is the mother tongue for a sizeable proportion of students in the Region and other languages such as Garifuna are spoken by minority groups. As yet, insufficient attention has been given to analyzing the impact of language on student learning in the Caribbean.

Opportunities

2.28 The challenges confronting the education systems are formidable; and even moreso on account of the urgency with which they must be addressed. As outlined above, they are inextricably intertwined with the socio-economic environment. Education systems are the products of and to a great extent producers of the societies they serve. They can be harnessed to steer change or allow themselves to fall prey to change. Much depends on the choices which are made. Caribbean Development to the Year 2000: Challenges, Prospects and Policies notes several growth prospects are expected during the twenty –first century, and which will have implications for the development of human capital. They include: a global demand for new products, increased demand for tourism and knowledge intensive services, readily accessible new and improved technologies; and enhanced prospects for strengthening economic ties among developing countries. There are also unexplored avenues in the area of culture and sports, and entertainment, a rapidly growing sector. The Caribbean has made noteworthy contributions in the fields of music, entertainment, art, crafts, design, literature, dance and sports; however these have not been systematically promoted either individually or jointly. Another positive development is that of public sector reform which is breaking down the barriers among ministries and sectors which would therefore enable a more integrated approach to human resource development.

2.29 If the Region is to take advantage of the projected economic opportunities, there are several requirements, *inter alia,* the promotion of an enabling environment- improved infrastructure and services- enhanced managerial capacities in the public and private sectors; appropriate legislation, knowledgeable, skilled, flexible labor; modern technologies, and societal stability. Vastly improved education systems with greater emphasis on learning for life are critical, for in the final analysis, education –formal, non formal or informal - in traditional or modern society, is essentially a process intended to equip one for living productively and creatively. It involves an understanding and appreciation for the physical and cultural environment in which one must function. It should prepare one to cope with change and create desired change. Caribbean governments, stakeholders and partners must therefore carefully examine their respective education systems to determine the extent to which the people of the Caribbean have equal opportunities which enable them to contribute to and cope with present and projected changes, the relevance of the curricula, the appropriateness of the teaching methodologies for promoting the desired knowledge and skills, and inculcating the required behavior and attitudes. There is need to take stock of current reform initiatives in light of shortfalls identified and future demands, and the structural and policy constraints which need to be changed. Furthermore, governments must ensure that the measures being labeled "reform" are not merely geared to maintaining the status quo. Education systems, in attempting to increase access, must move beyond the expansionist mode and place greater emphasis on equity and

effectiveness, refocusing teaching and learning on the development of the competencies, higher order thinking skills, and affective behaviors to compete in today's world. This implies *inter alia* greater knowledge and understanding of factors impinging on the teaching and learning of all socio-economic groups in the Caribbean, radical changes in teaching tools, and more efficient approaches to the use of scarce resources. The strategic steps to attain these ends are the focus of the next chapter.

III. THE WAY FORWARD

"Education commends itself as the one arena of governance and social progress that is most naturally fitted for federated action by member states"[15].

3.01 The challenges outlined in the preceding chapter require a new conceptual framework for the development of the sector, substantially reinforced commitment, and most importantly decisive action on the part of government, social actors and the international community, if they are to be successfully addressed. Failure to make right choices in the education sector could contribute to further marginalization of the Region, widening social and economic disparities and concomitant social and personal problems. An important starting point for action is an understanding of what is envisaged, what is to be achieved, what is the Vision of Caribbean Society and the citizens of the society.

The Ideal Caribbean Person

3.02 The Vision of the Ideal Caribbean Person adopted by the CARICOM Heads of Government at their 18th Summit, and to which all CGCED member countries might subscribe, provides a useful lens through which to apprehend the ultimate desirable outcome of the education system. Such a person is described as being someone who:

- *is imbued with a respect for human life since it is the foundation on which all other desired values must rest;*
- *is emotionally secure with a high level of self-confidence and self-esteem;*
- *sees ethnic, religious and other diversity as a source of potential strength and richness;*
- *is aware of the importance of living in harmony with the environment;*
- *has a strong appreciation of family and kinship values, community cohesion, and moral issues including responsibility for and accountability to self and community;*
- *has an informed respect for our cultural heritage;*
- *demonstrates multiple literacies, independent and critical thinking, questions the beliefs and practices of past and present and brings this to bear on the innovative application of science and technology to problem solving;*
- *demonstrates a positive work ethic;*
- *values and displays the creative imagination in its various manifestations and nurtures its development in the economic and entrepreneurial spheres in all other areas of life;*
- *has developed the capacity to create and take advantage of opportunities to control, improve, maintain and promote physical, mental, social and spiritual well-being and to contribute to the health and welfare of the community and country; and*
- *nourishes in him/herself and in others, the fullest development of each person's potential without gender stereotyping and embraces differences and similarities between females and males as a source of mutual strength.*

[15] Feature Address by Honorable Mia Amour Mottley, Minister for Education & Culture of Barbados to the Regional Conference on Public-Private Partnerships in Education sponsored by the DFID Caribbean, held in Ocho Rios Jamaica, March 2000.

Main Philosophical Elements of Education in the Twenty First Century

3.03 Embedded in this description of the Caribbean person are several implicit but unambiguous indicators of what the education system is expected to do. Most of these are consistent with the imperatives identified by the UNESCO Commission on Education for the Twenty First Century. In punctuating the need for the Caribbean person to demonstrate multiple literacies, creatively apply new technologies, and utilize the creative imagination in different spheres of daily existence, the vision embraces the imperative of learning to know, and on a continuous basis. In promoting a positive work ethic, and the capacity to create and take advantage of opportunities to control, improve and promote the physical, mental, social and spiritual well-being as well as the health and welfare of community and country, the imperative of learning to do is recognized. The emphasis on the interconnectedness between the individual and the community, family cohesion and the appreciation of diversity all highlight the need for learning to live together. In the very conceptualization of the philosophy by focussing on the person and the nature of his/her social and spiritual being, the imperative of learning to be is made explicit.

3.04 These philosophical positions are not vague abstractions but instead represent a long-term vision of the kind of individual that the reformed education systems of the region are expected to mold. They give emphasis to the whole person, the knowledge, skills and attitudes necessary for active participation in life, and underscore the role of education in enriching the human experience. They go beyond competitiveness and give emphasis to the role of education in fulfilling human potential, preserving cultural values, and promoting social cohesion. The philosophical underpinnings logically assume particular policy positions, forms and content of education provision. For example, the characteristics associated with learning to know imply that learning will be organized in such a manner that will facilitate its continuity, that it will be individualized to an effective extent, that the pedagogy will emphasize critical thinking and the capacity for self-directed learning. Also implied in this philosophical position is the belief that education is not simply about learning but also about the empowerment of the person and the creation of a better quality of life for all. In this regard, the role of education as a democratising force (so well articulated by John Dewey), and its power to transform (so convincingly expressed by Paulo Freire) are all taken into account.

3.05 In the past decade, there have been several reports on Caribbean education by many working groups and expert bodies and many prescriptions and strategies have been detailed, guided by global, regional and sub-regional initiatives. At the international level, the Education for All Initiative (EFA) provides a framework for strengthening basic education. At the regional and hemispheric level, there are comprehensive reform initiatives such as the Summit of the Americas Education Agenda and the CARICOM HRD Strategy, at the sub-regional level, the Organization of Eastern Caribbean States (OECS) Education Reform Strategy; and at the national level, for example that of the Dominican Republic involving non governmental organizations such as EDUCA and Plan Educativo. Major objectives include, increased access to secondary and post secondary education, improved quality at all levels and improved management.

Consolidating and Accelerating Education Reforms

3.06 A pre-requisite to the adoption of the Caribbean Education Strategy 2020 and development of national action plans is the rationalization, consolidation, and acceleration of existing education reform strategies and initiatives. These strategies have spawned a bewildering array of projects. Even in cases in which projects have similar objectives or focus on the same constituencies, implementation, reporting and financial management are exercised separately.

Opportunities for cross-functional integration among some of these projects are lost and the implementation capacity of Ministries of Education is being strained. The proposals here are not intended to be yet another layer of initiatives. It is incumbent on each member state to undertake a comprehensive review of the on-going reform initiatives, to identify the areas of convergence and to determine which actions in fact constitute national priorities in accordance with their particular educational profile, project management and implementation capacity and indigenous policy agenda. Important to the process of consolidating and reform efforts is that of building capacity for sector analysis and planning. In this regard, the establishment of a virtual Institute for Research, Policy Development and Planning linked to world data bases and networks such as the Knowledge Management Network of the World Bank and UNESCO, would facilitate comparative analyses, the preparation of plans and enhance capacities. The international community is also urged to take into account the multi-functionalism of Ministry staff, and work in a more coordinated manner to minimize the strain which ministries bear in responding to varied procedures and agendas.

Education in Cuba

The Cuban system of education has been subjected to severe resource constraints for several decades, yet compared with the rest of Latin America, it has maintained high quality. This was demonstrated in a recent assessment of third and fourth grade students in Latin America, in which Cuba ranked first in language and mathematics[1]. Among the factors which have contributed to the high performance of the system are:

- sustained high levels of investment in education with an average of 10%;
- high levels of non-salary expenditures: approximately 40% of the education budget;
- nation wide provision of low cost, high quality instructional materials, adapted to local realities
- consistent policy environment supportive of quality education;
- high professional status of teachers; regular in-service professional development through formal and in-formal methods;
- involvement of teachers in applied research aimed at improving learning outcomes;
- emphasis on evaluation and accountability throughout the system and aimed at school improvement through identification of problems and formulating and implementing plans of actions;
- a system of "emulation" rather than competition in which collaboration among peers is emphasized: high performing schools serve as models to others
- wide stake-holder participation in school management;
- strong commitment and support to rural children and those with special needs, through ensuring access and provision of incentives to teachers who work in remote areas;
- linking school and work through "labor education" emphasis on technical vocational education (50% of students who complete grade 9 pursue these subjects; and
- provision of "values education" as a core subject in the curriculum.

These are important lessons for other countries in the Region.

[1] UNESCO/OREALC Laboratorio Latinoamericano de evaluacion de la Calidad de la Educación, Primer Estudio Internacional Comparativo sobre Lenguaje, Matemática y Factores Asociados en Tercero y Cuarto grado, UNESCO, Santiago, 1998

The Caribbean Education Strategy 2020

3.07 This Strategy does not seek "to reinvent the wheel" but draws on the past and on-going initiatives, takes account of new and projected challenges, and allows for the differential rates of development and the individual nuances that exist between education systems across the Region. It draws on lessons learnt from other countries. Cuba, a country with considerable resource constraints provides a useful example of the impact of strong commitment and clear policies on

the performance of the education system. The Caribbean Education Strategy 2020 recognizes that national education systems cannot all be expected to metaphorically "play the same instruments at the same time" but seeks to make it possible for each to find their own place in the symphony that is the region. The objectives are:

- an internationally competitive labor force; and
- more effective and equitable education systems.

3.08 These objectives will be realized through the following strategies:

- narrowing the knowledge gap;
- making the school and the classroom the focus of the education system;
- eradicating inequities in the school systems;
- strengthening regional collaboration; and
- enhancing educational financing and management.

Within each of these broad strategies some activities have been identified as being of high priority for all countries.

Narrowing the Knowledge Gap

- **Accelerating the process towards universal secondary education and improving regional secondary completion rates for school age and out of school populations.**
- **Enhancing capacities to generate, disseminate and utilize research, particularly in support of educational reform.**
- **Diversification of tertiary level programs to meet market needs, and increasing regional tertiary level participation and completion.**

3.09 The rapid rise of the knowledge economy has introduced a new basis of inequality in the global order: the knowledge gap. As knowledge becomes an increasingly important factor of production, the extent to which developing countries are able to narrow that knowledge gap is going to be a key determinant of their competitiveness.

3.10 The World Development Report 1999 points out that addressing the knowledge gap involves enhancing the capacity for acquiring, generating, disseminating and utilization of knowledge. Knowledge acquisition and generation would involve increasing access to knowledge and participation in the creation of knowledge. Knowledge transmission implies the need to ensure wide and effective means of distribution. Knowledge absorption refers to the discriminate utilization of knowledge.

3.11 In the context of the Caribbean and the deficiencies identified earlier in this document, addressing the knowledge gap also requires the inculcation of appropriate values and attitudes for the world of work and for global communication.

3.12 Furthermore, knowledge acquisition and generation involves determining what one ought to know, developing the systems to acquire knowledge, and establishing and implementing a research agenda in all fields of endeavor. Learning to know is at the foundation. Sound basic education is therefore a prerequisite with successful secondary completion a key indicator. The strategy recommends:

- expediting measures to provide universal secondary education in all countries by 2005. This is fundamental. Upgrading the educational levels of out of school youth and adults to enable them to acquire secondary level academic and technical skills and certification for work and further education training is an urgent requirement. (Haiti is expected to focus public expenditure on attaining the goal of universal primary education, and continue to promote private sector contributions at all levels);
- expand, diversify and network tertiary and higher education institutions regionally and internationally to facilitate the increase in enrolment and specialization in science and technology generally and in areas related to the productive expansion of the national and regional economy; and promote exchanges and attachments among faculty and students regionally and internationally. In this regard, it would be useful to review the 1997 proposal for UNESCO/COMSEC Network of Tertiary Institutions in Developing Small States which has not yet been implemented.
- transforming traditional public libraries, museums, community centers and such other public and private institutions into user-friendly "knowledge centers" equipped with Internet access, and facilities for exchange and dialogue;
- strengthening of research and development including generation of indigenous knowledge, through the development of appropriate infrastructure, human resources and allocation of required financial resources. In the sphere of education itself, it is necessary to acquire information on the processes and outcomes of the education system in relation to the demands of the national, regional and international market. This would include fostering links between ministries of education, industry and tertiary level institutions, a more systematic development of labor market information systems and on-going research into education policy issues;
- broadening the skills base and mastery of science, technology, mathematics, foreign languages and communications skills at all levels. The region as a whole lags far behind in science and technology and a more concerted effort is needed to bridge that gulf. The Region could benefit from the recent study of measures to increase the appeal of science in the OECD countries. The Science Learning Center in Jamaica is a useful example of a Caribbean initiative; and
- expanding and upgrading work force education and training, including vastly increased on the job training to meet the new and changing demands of the market place. Continuous upgrade of the workforce is critical to competitiveness.

The Science Learning Center: Partnership to Promote Science Education

In 1990, the ICWI Group Foundation, recognizing the importance of early acquisition of skills associated with the learning of science, in collaboration with the University of the West Indies, Mona, Jamaica established a Science Learning Center to promote interactive learning of science. It serves as a demonstration resource and through its activities – science clubs, workshops, school visits, provision of audio-visual aids and publications -has had an impact on more than 200,000 students and 4,000 teachers. Its work in early childhood education began in 1997, and with the assistance of Japanese Government Grass Roots Assistance Program and UNICEF developed the Science matters in life everyday (SMILE) program in 1998. Other major partners involved in the SMILE program are the Ministry of Education and Culture, Institute of Education and Joint Board of Teacher Education and the Miami Museum of Science, Florida. SMILE produces low cost, hands on science activities for pre-school children, trains early childhood educators in the use of interactive materials and methodologies, and disseminates information on appropriate science and early childhood educational teaching and learning materials. The Center has a data base of more than 300 indigenous activity materials as well as culturally appropriate international materials, science education videos, activity kits and guides and manuals. More than 200 educators have been trained. Preliminary assessment has indicated keen interest on the part of students and teachers.

It is anticipated that an early introduction to the exciting world of science through low cost materials and training of teachers would stimulate continued interest in both the teaching and learning of science.

3.13 Knowledge absorption involves strengthening the capacity of the society to utilize knowledge for its own advancement, and creating a culture which utilizes knowledge as an important component of decision making. It implies the creation of opportunities to evaluate information, gain knowledge and the development of skills to apply it. It presupposes expanded and improved basic education, and a discerning citizenry. The strategy calls for the following efforts:

- strengthening those skills which would promote critical thinking and problem solving throughout the education cycle. It goes beyond the provision and completion of primary, secondary, and tertiary education to linking educational institutions with the national, regional and global environment, focusing on more appropriate methodologies to achieve the desired outcomes; and improved means of assessment. It emphasizes the need to balance theory with practice; and
- establishment of a system for life long learning, which emphasizes access to new knowledge for improved living. The demands of global competitiveness and concomitant social and personal pressures require a paradigm shift from the old modes of adult education as a remedial necessity to new modes of life long learning as a developmental imperative.

3.14 Knowledge transmission measures are aimed at reinforcement of the means for sharing of information and increasing dissemination of knowledge in a cost effective manner. These strategies include:

- making greater use of distance education and information technology, particularly at the tertiary levels, to reach sectors of the population who might not have access to post-secondary education opportunities. The expansion of the University of the West Indies Distance Teaching Enterprise (UWIDITE) to serve all UWI member countries is a useful approach which should be extended to the basic education system to provide quality instruction throughout the system. This has been done effectively in Japan through the transmission of instruction by master instructors to schools

throughout the country. In the Caribbean context, this will also involve the challenge of developing new instructional interactive and multi-media material, and linking remote islands cost-effectively; and

- promoting trans-disciplinary and multi-disciplinary approaches to learning and the redesign of curricula to reflect this. Systematic attention must be given to the professional development of teachers and lecturers and their preparation as facilitators of knowledge transmission.

Making the School and the Classroom the Center of Focus of the Education System

- **Preparation and implementation of individual school development plans based on identified needs**
- **Enhancing the capacity of all principals and teachers to effectively manage the schools.**
- **Allocating resources to schools in accordance with identified needs**
- **Establishment of minimum standards for the effective delivery of education from pre-school to tertiary level**

3.15 Making the school the center of focus of the education system involves the re-focussing of reform efforts on the school. The critical message is that the school must adapt to a changing society and world. Classrooms must become integrated into the wider society. Particular attention must be paid to the following elements: the learning environment, the capacity of teachers and the structures and systems of governance and community linkage. Significant effort needs to be put into team building, mentoring and peer support directed to school improvement.

Management training of Principals in St. Lucia

As part of its organization change strategy and in keeping with its goal of making the school the center of focus of the education system, the Ministry of Education, Human Resource Development, Youth & Sports contracted the Institute of Business (IOB) of the University of the West Indies (UWI) to run a management-training program for all Principals, and Vice Principals. The program is designed to expose the leadership of all schools to modern management theory and practice and to create interventions through team and peer effort for school improvement.

It is a 2-year program (started in December 1999) organized by modules with intensive two-week instructional time spread throughout the program period. The application in the schools of the knowledge gained is part of the program concept. For the January semester, Principals have already prepared School Improvement Plans and have held one-day workshops with their staff to refine and develop these plans. The content of the program is directly related to management challenges faced by Principals in the day-to-day administration of their schools and includes modules on Strategic Planning, Change Management, Financial Management and Budgeting for schools, Team building and Leadership. Early indications are that Principals are poised to implement many school-level innovations arising from the District level Teams that have been established, and significant improvement in the management of the schools is expected. The implementation and impact will be closely monitored.

3.16 The recognition of the centrality of the school as a learning environment ought to extend beyond the boundaries of the formal education system. The reality in many Caribbean countries (as in other developing countries) is that the school often represents the most important social infrastructure that exists in many rural communities. As a result, there is frequent demand for access for community use. The strategy recommends a deliberate reconceptualization of the school as a central site of learning in the community as a whole. Rather than seek to duplicate social infrastructure, the reconfiguration of the school can help to meet the needs of the community for community learning, lifelong education, a locus of indigenous knowledge

generation and dissemination. In St. Lucia for example, a prototype design has been developed by local architects for reconfiguring the school as a Human Resource Development Center (HRDC). In this prototype, the community library, school library and computer laboratory are all combined in one adequately equipped information facility that serves both school and community. Particular facilities that are needed for adult education, community animation such as meeting rooms, a multipurpose auditorium, multipurpose play courts, are shared between school and community. By amalgamating these facilities, it is anticipated that better quality facilities can be provided in a more cost effective manner that maximizes the utilization rate of the facilities.

3.17 An important related element of the strategy is the need to reform the infrastructure of the school to ensure that the school is capable of addressing the purposes of education in the 21st Century. This implies the design of classrooms so that they can be reconfigured in different ways to suit different learning styles and accommodate different types of activities (traditional lectures, large and small group work, multi-media interaction, project centers etc.). It also requires the establishment of (minimum) specifications for various kinds of schools; preparation for refurbishment in accordance with these specifications; development of adequate maintenance schedules and plans and attention to the instructional tools and equipment requirements for the effective functioning of schools.

3.18 If the school is to be recognized and treated as the center of focus of the education system, then the teacher – as the primary agent of knowledge transmission – needs to be thoroughly equipped for that role. The strategy recommends the establishment of an appropriate framework for teacher (re)training and career development consistent with the demands on the profession. The content and modalities of teacher training need to be redefined to take account of new demands and roles expected of the teacher. The incorporation of information technology, a rigorous element of guidance and counseling/capacity to deal with the psychological needs of youth, student centered pedagogies constitute part of that new challenge. Associated with that training must be the definition of appropriate performance standards and incentives so that intrinsic motivation can assume a greater function in the professional development of the teacher.

3.19 If there is to be consistency about the centrality of the school within the system, the modalities of governance and administration must also be addressed. The following recommendations are therefore aimed at giving priority to governance and administration of the schools:

- reform governance to give schools greater autonomy in prescribed areas;
- reform school administration to ensure that greater knowledge management is applied (use of data for decision making; application of research findings to address issues of concern);
- strengthen instructional leadership by Principals;
- promote school-based professional development (e.g. use of school staff professional development days; staff seminars to share research or writing; subject departmentalization in large schools); and
- establish accountability relationships and mechanisms with the communities that the schools serve.

Reducing Inequities in the School System

- **Ensure that budgetary allocations are equitable on a per capita basis and provide extra resources to disadvantaged students through categorical grants.**

- **Develop and implement compensatory education, programs which emphasize the early acquisition of literacy skills, and the retention of poor students in school**
- **Increase opportunities for students from lower socio-economic backgrounds to access tertiary and higher education.**

3.20 It is evident that in most countries various categories of students do not fare well in the school system. They include those from low socio-economic communities, remote areas and persons with disabilities. Ministries of Education together with both public and private sector agencies, must promote and utilize data generated from household surveys and poverty assessments to more precisely identify the communities and students that are at risk and under-served; however, there is need to take precautions to avoid stigmatizing the students involved. Ministries of Education need to develop capacities to disaggregate and analyze educational inputs and outputs, and non-school factors which contribute to under-performance. Specifically, there is need to:

- ensure that budgetary allocations are equitable on a per capita basis, and provide extra resources to disadvantaged students through categorical grants. Equalizing resource allocation across school type alone, is insufficient to provide the needed support for the disadvantaged students. Categorical grants should be available to support schools with special needs, for example, those having a large percentage of students reading below grade level. Compensatory education could be financed through this mechanism. In some countries, subvention to schools is based on the number of teaching positions approved, which, in turn, is based on recommended student-to-teacher ratios for each school type. Since the ratios vary across school types, the basis for resource allocation is inherently unequal. In order to rectify this, allocation of public resources could be based on enrollment (verifiable as average daily attendance) for all school types. This is akin to providing capitation grants, which is a more transparent and equalizing mechanism. This would raise the floor for the resource poor schools, and reduce public subsidies for the privileged schools. Since the average daily attendance has to be verified by periodic, unannounced inspection, this will also provide incentives for schools to improve record-keeping and encourage students to attend regularly;
- evaluate initiatives being undertaken to assist poorer communities and provide additional support, as appropriate, to disadvantaged schools and communities. These would include school meals, uniforms, book grants, enhancement of the curricula, and tutoring;
- strengthen the network of social institutions which provide services to children to enable early identification of problems and effective measures to combat them. Areas of focus should include attendance, nutritional status, home environment, evidence of disabilities;
- sensitize administrators, teachers and counselors to the issues of inequity and measures to address them;
- increase the participation of students with disabilities at all levels of education, through the provision of appropriate infrastructure, instructional materials, and teaching staff;
- induce teachers to serve in remote or 'hardship' schools by providing allowances, housing etc.;
- establish scholarship schemes at secondary and post-secondary levels to benefit students from lower socio-economic groups;

- increase access to high quality early childhood education to children from lower socio-economic groups;
- adopt a more equitable approach to assigning students to secondary schools. The Barbados partial zoning policy is an attempt to break down the stratification of schools common in the Region;
- develop and implement appropriate compensatory, diversified education programs (cultural and academic) for youth at risk, with special attention to addressing the needs of under performing males, and pregnant students; and
- highlight programs aimed at enriching the learning environment of the disadvantaged such as Science Matters in Life Everyday (SMILE), an initiative to introduce science at the pre-school level, assisted by the Insurance Companies of the West Indies (ICWI);and the Infodev Project supported by the Jamaica Computer Society Education Foundation.

Strengthening Regional Collaboration

- **Document and disseminate information on available educational resources including regional expertise, and exemplary practices within and outside the Region, and exemplary practices.**
- **Enhance and expand distance education technologies and methodologies.**

3.21 The deepening of regional cooperation in education must be an essential element of any regional education strategy as both the exigencies of size and the logic of historical experience have validated the importance of this collaboration. Regional integration is both a means to educational development, and a goal.

3.22 The elements of the strategy related to regional collaboration involve the following:

- promoting the concept of the Ideal Caribbean Person – recognizing the central role of education in the construction of social mentalities and in nurturing regenerative capacities. The challenge is not only about economic competitiveness but also about the striving to higher standards of excellence and social development;
- strengthening regional frameworks and networks, to address common deficiencies, pool scarce resources and maximize impact of new solutions. In facing the challenges of the future, there are some important areas in which mechanisms for regional action need to be established (many of which can be done through existing regional institutions); They include:
    - common standards at various levels of basic education and measurement of learning outcomes e.g OERU;
    - science and technology promotion starting at the earliest levels as has been successfully done in Jamaica through the Science Learning Center and SMILE project; and
    - strengthening the teaching of mathematics English, foreign languages, health and family life, and information technology. CXC can play a major role in documenting major areas of weakness.
- maximizing distance and information technology utilization – already cited as an important element of the general strategy but repeated for reinforcement;

A Regional Initiative:
CARICOM/Multi-Agency Health and Family Life Project

CARICOM/MultiAgency Health and Family Life Project is a regional strategy in support of a comprehensive and integrated approach to Health and Family Life Education (HFLE) in the formal and non-formal educational sector in the English speaking Caribbean. It is multidisciplinary and involves multiple partners in fourteen countries. [1]The HFLE initiative (which commenced in the seventies as Family Life Education) is a developmentally appropriate, sequenced programme and aims to empower the young people of the region with the necessary skills, attitudes and behaviours for the challenges of adolescence and adulthood, and to combat health threats such as substance abuse, HIV/AIDS, and life style diseases. It emphasises the principles of "The Ideal Caribbean Person", as enunciated by CARICOM, focuses on core areas as health and well being, eating and fitness, interpersonal relationships, sexual and reproductive health, managing the environment. and personal development. [1]The program builds skills in core areas of problem-solving, decision making, critical thinking, creative thinking, self-awareness, ability to empathise, coping with stress, communication skills and interpersonal relationship skills.

Common curriculum and materials development for the region are being developed based on a theoretical framework and research on youth issues. Attempts are now being made to compile an inventory and assess the resource materials in use throughout the region, and identify gaps. Methodologies are participatory and innovative, and there is scope for a wide range of assessment and evaluation methods. HFLE may be delivered by infusion into existing curriculum, as a separate subject, or by a combination of both methods. Classroom teachers are encouraged to refine the curriculum in response to the specific needs of their students and retain some autonomy over the learning environment.

Outputs of the project include: A Strategy for Strengthening Health and Family Life Education in CARICOM Member States (UNICEF, 1995) which outlines the guiding principles, and The Core Curriculum Guide for Health and Family Life Education in Teacher Training Institutions, which is used widely to train teachers.
There is need for an evaluation of the impact.

[1] Partner agencies involved in the Project include the CARICOM Secretariat; Pan-American Health Organization/World Health Organization (PAHO/WHO); United Nations Educational, Scientific, and Cultural Organization (UNESCO); United Nations Drug Control Programme (UNDCP); United Nations' Fund for Population (UNFPA); United Nations Development Programme (UNDP); United Nations Development Fund for Women (UNIFEM), the Caribbean Child Development Centre (CCDC), UWI Schools of Education, and the Advanced Training and Research Facility Management Unit (FMU) at Mona Campus, Jamaica; and the United Nations Children Fund (UNICEF).

- establishing linkages regionally and with international institutions: national and regional educational institutions while addressing the imperatives of the region must continually seek to do so within a framework of global competitiveness and internationally acceptable quality/standards. The technologies of the information revolution facilitate this process by enabling significant networking to be conducted virtually. It is proposed that national and regional institutions establish these virtual linkages and exchanges with a wide range of international counterparts and that particular attention be paid to the virtual networking of schools both within the region and beyond. The virtual twinning of schools opens significant windows of opportunity for enriching the learning experience with exposure to other cultures, languages, student-to-student connections and the inculcation of a truly global consciousness;
- establishing a system for the use of master instructors in core subject areas involving the use of audio-visual and computer aided instructional material – historical weaknesses in science and mathematics teaching require that the finest available resources be shared across national systems and the adoption of modes of instruction

representing best teaching practice that can be easily replicated throughout the system. In St. Lucia a private company – Bouyon Corporation – is developing a modular audio-visual mathematics package directed at common entrance and early secondary levels. The modules focus on essential concepts identified through research as being particularly problematic to students at that level so as to be of self-instructional remedial value. The World Bank funded ROSE Project in Jamaica allowed the Joint Board to develop instructional videos for teachers in five subject areas. The Joint Board is also developing instructional videos using recently appointed Master Teachers in Jamaica. These videos will emphasize new instructional strategies related to recent curriculum reforms at the primary and secondary level. The target market is the entire Anglophone Caribbean and Caribbean children in the Diaspora. The University of Cambridge has been contracted as an independent auditor of the program. It is likely that, should these programs prove successful, they may point the way to new modalities of public-private sector partnership in curriculum development and interactive materials development;

- networking of Ministries of Education and linkage with international knowledge management initiatives and establishment of intra-ministerial collaboration on human services at national level – consistent with the need to address the knowledge gap, Ministries of Education in the region need to share information and lessons learned from best practice in a systematic manner. The strategy proposes that there be an active networking among them and that linkages be established between the region and international knowledge management initiatives. At the national level, it is also imperative that there be an active framework for intra-ministerial collaboration in human services. Ministries of Education need to work more closely with Ministries of Health, Community Development, and welfare agencies to harmonize policy and maximize the utilization of scarce resources;
- creating and expanding teacher and student exchange schemes and establishing virtual school communities across the region. The utilization of information technologies for networking needs to focus specifically on the application of the technology at the level of teachers and students: teachers engaging their peers across the region to exchange ideas, instructional methods, best practices; developing pan-Caribbean solidarity within the profession, and nurturing subject specialization and competencies. Among and between students, the new technologies can help in sharing knowledge, establish direct friendships, deepen cultural understanding, strengthen linguistic competencies and help develop a sense of global citizenship;
- consolidating regional school sporting competitions – while virtual contact creates new, affordable modalities of exchange, it ought not replace physical human contact. The promotion of school sports and regional sporting competitions can be an important avenue for developing both teamwork and a positive competitive spirit;
- establishing new structures of governance for teacher education – it has been consistently established that the quality of the teaching service will, to a large extent, determine the effectiveness of the reform effort. Attention therefore has to be paid to the modalities of teacher preparation and training. It is not simply a matter of modifying the content of teacher training to include areas such as information technology, but more strategically of developing new structures of governance so that the training of teachers is subject to continuous review, assumes a more flexible and responsive character, and is closely articulated with the philosophy of education; and
- promoting regional collaboration in developing an appropriate regulatory and quality assurance framework for distance education – increasingly the region has to contend with distance education providers offering programs which may be of questionable

quality. Part of the effort to ensure global competitiveness must involve the preservation of world class quality at all levels of education and, while promoting increased access to this level of education by distance education means, appropriate safeguards must be established to guarantee the quality of the programs offered.

Enhancing Educational Financing

- **Strengthening the capacities within the entire education system from central level to the school, to conduct financial analyses, develop cost effective programs and manage the systems more efficiently.**
- **Allocating more resources to the sector through mobilization of resources from private sector partnerships, and support from the international community**
- **Developing a culture of accountability from Ministry to classroom level.**

3.23 Most countries have indicated that they are already fully or over committed in education and cannot afford an increase in their recurrent budget for the sector. Nonetheless, significant increases in recurrent funding for the sector in the next few years are implicit in the on-going capital expenditure programs in most countries.[16] The scope for increased funding is evident in the variations from country to country in the educational effort being made. Barbados and St. Lucia spend over 20% of their national budget on the sector while Guyana spends just about 10%. The other countries fall somewhere between these two extremes. In general, the countries need to increase their expenditure of education if the strategic objectives are to be met within the stipulated time frame. These increases could be held to manageable levels if substantial sectoral adjustments are undertaken with the aim of promoting greater efficiency in the use of resources. Several measures ought to be considered:

- Strengthening the capacity of ministries of education for financial analysis and management – so that they might better manage and plan for the sector, lead and coordinate qualitative improvement in the system. An enhanced capacity for financial analysis is critical if ministries are to be equipped to identify, inequities, inefficiencies and make better use of the resources allocated to the sector. Greater emphasis should be placed on:

    - modernizing the approach to financial management to include the establishment of an autonomous financial analysis capability to keep under continuous review the efficiency, equity and effectiveness of budgeting and expenditure, and the incorporation of information technology in schools to facilitate this process of management, reporting and accountability and providing more direct support to schools in examining the costs of their needs and ways of addressing them;
    - re-examining the internal allocation of funding – including possible redistribution of resources among education sub-sectors and achieving a better balance between personal emoluments (salaries and wages) and other components
    - instituting a clear policy pursuing efficiency and accountability in the use of funds – in the economic circumstances of the region, whatever amounts are made available for the sector need to be applied efficiently and to optimal effect.;
    - promoting partnerships between schools, private sector, government and communities; – the philosophical thrust of the strategy recognizes an increasingly vital role for other stakeholders in the educational enterprise. This partnership is not simply about the mobilization of financial resources for schools but about alliances

[16] Of the lending approved by the three multilateral development banks (World Bank, IDB and CDB) since the start of their operations in the region, about 40% was committed over the period 1994-99.

that fundamentally alter the governance processes, the content of learning, the definition of skills and competencies required from the education process, and new collaborative relationships that bring the world of school and the world of work closer together;

- providing incentives for private contributions to the sector – The education systems of the Region do not benefit from a tradition of substantial private donations or endowments, as do many educational institutions in developed countries. Modest assistance is provided by firms to a few secondary schools and by the PTAs and communities (in cash and in kind) to primary and secondary schools. Dominica took the initiative of establishing a Fund for assistance to needy students to which the general public subscribes. Schools in Trinidad and Tobago and St. Lucia have traditionally raised appreciable sums for various purposes. Such a mechanism can attract large and small donations and foster a practice of giving by individuals and corporations. Gifts to schools for non-curricular school activities could also be encouraged. Much might be accomplished through tax incentives and publicity. Governments should also encourage firms to interact with schools through such arrangements as internships for senior students, information on careers and the more traditional and formal apprenticeships and training incentives such as exemption from any levies for vocational training;
- instituting better/more competitive procurement practices for sourcing technical services, goods and supplies; and
- strengthening national and sub-regional capacity to negotiate with external agencies for financial and technical assistance

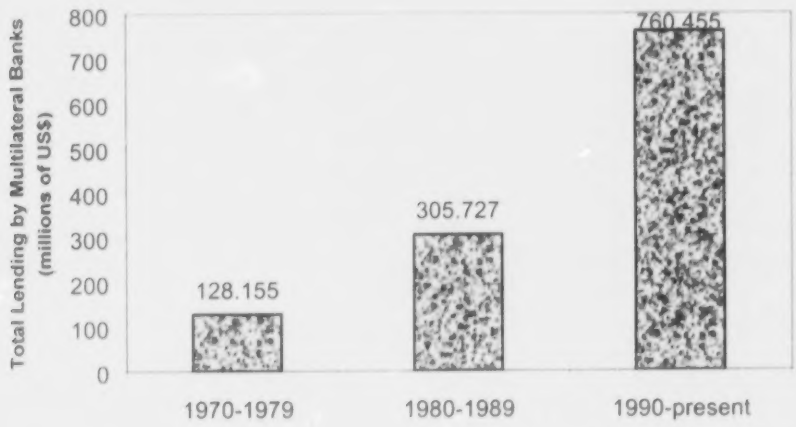
IV. External Financing of Education in the Caribbean

Current Interventions

4.01 Partnership has always been a characteristic of education in the Caribbean. In the early years, religious bodies played the predominant role. More recently, the partners have become more varied with International Financial Institutions (IFIs) – World Bank, Inter American Development Bank (IDB) and the Caribbean Development Bank (CDB) – assuming an increasing importance, particularly in the past fifteen years. The assistance from the multi-lateral agencies has been primarily in the form of capital project financing, while other agencies such as UNESCO, USAID, UNICEF, DFID, the European Union (EU) and CIDA have provided technical assistance in areas such as curriculum development, teacher training, instructional materials and management.

4.02 Since 1970, a total of US$1,194,337 mn has been provided to the Region by the IFIs, of which the World Bank has provided 29.6%; IDB 56.3%; and CDB 14.1%. CDB's entry into capital projects for education has been relatively recent (1992); however, it has funded Student Loan Schemes since 1973. Figure 9 shows that there has been steady increase in the provision over the three decades; however, when viewed on a per capita basis over the period, (Table 6) the level of financial assistance is by no means enormous – on average, less than US$3 per student. The figure for the period 1994-99 is US$6.48, a vast improvement over the US$0.93 of the 1970-79 decade. Furthermore, Haiti and the Dominican Republic with the largest student populations and a high level of poverty are even below this low average - Haiti, having received a mere US$0.14 per student, and the Dominican Republic US$0.64. There is no evidence that targeted poverty reduction has so far been an objective of these interventions. Detailed data on financial assistance from other major donors were not readily available for all countries in the Region; however, it is estimated that currently they are providing more than US$80mn to the OECS countries: the European Union providing more than US$60 mn; DFID US$8 mn; and CIDA US$15.9 mn.

Figure 9
Amount of Multilateral Banks' Support to the Caribbean for Education, 1970-present



Source: World Bank, Caribbean Development Bank, Inter-American Development Bank, 2000.

Table 6
Average Per Student Lending for Education in Caribbean Countries
1970-1999

	CDB	IBRD/IDA	IDB	Total	Population 5-19	Avg Annual Lending Per Student
Anguilla	1.500	0.000	0.000	1.500	n/d	n/d
Antigua & Barbuda	12.450	0.000	0.000	12.450	26.000	$15.96
Bahamas	0.000	17.000	21.000	38.000	90.000	$14.07
Barbados	50.926	29.800	131.800	212.526	60.000	$118.07
Belize	5.632	7.100	0.000	12.732	91.000	$4.66
British Virgin Islands	3.081	0.000	0.000	3.081	n/d	n/d
Cayman Islands	0.460	0.000	0.000	0.460	n/d	n/d
Dominica	7.497	6.140	0.000	13.637	22.715	$20.01
Dominican Republic	0.000	27.000	120.900	147.900	2.710.000	$1.82
Grenada	3.663	7.600	0.000	11.263	33.555	$11.19
Guyana	1.500	29.300	60.700	91.500	265.000	$11.51
Haiti	0.000	34.500	53.000	87.500	9.017.000	$0.32
Jamaica	6.606	89.100	74.100	169.806	788.000	$7.18
Montserrat	0.931	0.000	0.000	0.931	n/d	n/d
St. Kitts & Nevis	21.711	0.000	0.000	21.711	13.758	$52.60
St. Lucia	27.077	6.720	0.000	33.797	60.000	$18.78
St. Vincent & Grenadines	10.026	0.000	0.000	10.026	30.000	$11.14
Trinidad & Tobago	0.000	101.000	144.200	245.200	387.000	$21.12
Turks & Caicos	5.621	0.000	0.000	5.621	n/d	n/d
Regional	8.896	6.000	56.000	70.896	--	--
Suriname	0.000	0.000	3.800	3.800	134.000	$0.95
Total	167.577	361.260	665.500	1194.337	13,728,028	$2.90
	14%	30%	56%			

*Amounts are in millions of US$.

Sources: World Bank, Caribbean Development Bank, Inter-American Development Bank, 2000.

4.03 This chapter examines the key issues of partnership and proposes areas for further support by external agencies to the Region. For the sake of this report, all interventions, apart from policy dialogue, are labeled as projects.

4.04 Generally, support from the IFIs has been provided on a bilateral basis. During the period under review each of the agencies provided funding for just one regional project (See Annex: Contributions to education by International Financial Institutions). Objectives have spanned increased access to secondary education; strengthening management including the areas of planning and project management; improving educational quality in particular curriculum development, teacher training especially in subjects where there is marked deficiency - science, mathematics, English, and social studies, and enhancing capacity in student assessment.

Issues in Project-Financing

4.05 In 1999, at a workshop focussing on experiences in external assistance to the education sector, in particular the project approach to educational development, representatives of the Region agreed that education projects have contributed significantly to sector development, and are serving as catalysts for education reform[17]. Nonetheless, it was noted that there was much scope for improving this type of partnership. They highlighted the need for projects to be part of broader sector programs instead of isolated piece-meal efforts. Participants cited a number of factors which have posed difficulties in designing and implementing education projects over the years. These include:

- the relative inexperience, especially of the smaller countries, with IFIs their varying requests, procedures, schedules, and processes;
- absence of comprehensive sector analyses and long term plans;
- weak capacity – planning, project management, negotiating skills - manifest in procurement difficulties, inadequate supervision of consultants, and other aspects of the project;
- insufficient participation of implementers in project preparation and design;
- unrealistic implementation schedules which fail to take into account local capacity and procedures, and the challenges in effecting change;
- failure to include a management of change sub-component, vital for reform;
- mismatch between project design and capacity of the ministries; and
- conditionalities seldom take into account local procedures and realities and the difficulties in effecting the necessary changes within the prescribed time frame.

4.06 Limited communication among the range of stakeholders and implementers, in part due to failure to clearly define new roles and relationships; as well as delays in implementation; often attributed to inexperienced staff and inadequate preparation for implementation, have been common. These factors have led almost inevitably to cost and time over-runs and point to the need for ministries to involve stake-holders in the analysis of issues and search for solutions, and better orient staff for organizational changes concomitant with reform projects. St. Lucia's involvement of a wide cross section of stakeholders in the development of the Long Term Plan (1999) provides a good example of what is required to ensure commitment. The Barbados Town Meeting approach to the formulation of the EDUTECH project is yet another which other countries might emulate.

4.07 Recommendations for improving the project approach to educational development

[17] Regional workshop in "External Financing in Education: The Project Approach" was held in St. Lucia in September 1999.

emphasize: the need to have projects emanate from sector plans and programs informed by policy analyses and sound pre-project preparation and the involvement of a wide cross section of stake-holders. To this end, IFIs and other partners should provide assistance for conducting sector analyses, preparing long term sector plans and programs and strengthening capacity within the Region to do so. The OECS countries have been receiving this type of assistance, it was also proposed that a regional research and planning facility be established. This, as noted earlier, can be a virtual institution, consisting of consultants of international standard and linked to national and regional institutions with potential and demonstrated capacities. Their primary function would be to promote research and planning in education, including assisting countries with project preparation activities. It was further recommended that donor agencies develop a coordinated approach to support education long-term plans and programs. More detailed projects could then be developed within this context.

4.08 Participants of the workshop concluded that countries should ensure that key project implementation staff be involved at project preparation stage, at which time training or other forms of technical assistance should be provided. As part of the re-structuring of ministries, effective mechanisms for the management of externally financed interventions must be put in place. They go beyond the introduction of project units which are often isolated within ministries. These units should be integral to the work of the ministry and be seen as central to the planning function of which they are a part. Both St. Lucia and Dominica have endeavored to integrate project management units (PMUs) into the broader work of their Ministries, and in the case of St. Lucia, project management procedures and principles in the areas of procurement and accounting are being extended to the entire Ministry. External partners should provide concentrated support to enhance capacity in this area. Specifically, training for key staff such as project managers, procurement specialists, and accountants should be facilitated. Project launch workshops should be of longer duration and focus on the project tasks rather than just information provision. All implementers should be trained. It was felt that, particularly for weaker projects, there should be more frequent supervision that combines an element of training in the generally different areas of financial management and procurement. Cross fertilization among project implementation staff through attachments, compilation of consultants' lists, summaries of reports, exemplary project practices, Internet chat facilities are viewed as being useful for improving project implementation and outcomes.

4.09 Both external partners and governments are keen on measuring the impact of projects on the education systems. There is therefore need for strengthening national and regional capacity for impact analysis, vastly improved data and clear base line and monitoring indicators at the project design phase.

4.10 As the number of donor agencies involved in educational development in the Region increases, there is clear need for all partners to collaborate with each other in assisting governments. This point cannot be over emphasized. DFID in a recent publication "Strategies for Achieving the International Development Targets: Education for All" noted that "inflexible procedures, agency identity, time-driven spending agendas, weak technical capacity" are among the factors which impede the development of true partnership. They recommend that coordination should be "based on greater clarity of roles and responsibilities in line with comparative advantages", and the need to "subordinate narrow national or institutional mandates to the broad needs of a developing country". The IDB "Report on the Eighth General Increase in the Resources" also recognized the need to streamline its "analytical efforts with other agencies to reduce redundancies and duplications." Ministries of Education, especially in the smaller countries are too often overwhelmed by the number of consultants, the need to produce various reports in accordance with different formats, and adhere to the respective guidelines of each agency. There seems to be a need for all agencies both national and external to cooperate and

rationalize their procedures and practices. Ministries of Education are small and inadequately staffed, therefore common reporting, establishment of a common database would avoid unnecessary duplication.

Addressing Priority Areas

4.11 Most external agencies are mindful of the challenges, and have indicated interest in working towards greater responsiveness to client needs. There is also evidence of the new thrust towards collaboration and a broader perspective. For example, in Jamaica IDB has provided major support for primary education while World Bank's assistance has been primarily at the secondary and tertiary level. Several education projects have been co-financed. These include the CDB, and IDB-financed UWI Science and Technology Program; The World Bank and CDB are supporting the St. Lucia Basic Education Reform Project; IDB and CDB are financing the Barbados EduTech Project, and DFID and the World Bank are cooperating in Belize. Support has been provided for the enhancement of planning capacity and the development of long term sector plans in St. Kitts and Nevis, St. Lucia, Grenada and Dominica as sub-components of their basic education reform projects. In the early nineties, the World Bank in order to address the enormous gap in analytical work funded a comprehensive study on education in the Region. More recently (1999) analyses of education issues have been conducted in Haiti and Belize.

4.12 It is over thirty years since the IFIs and other agencies have been providing assistance in education to the Caribbean and other developing countries. During this time, considerable experience and knowledge have been amassed. This, together with the considerable human and financial resources can contribute in large measure to assisting governments in addressing the priority areas outlined. Given the magnitude of the needs, it is evident that external agencies need to consider increasing their support. Greater effort will have to be made to involve non governmental agencies working at the community level and the private sector in the entire process of education, particularly in seeking alternative approaches to reaching those now excluded.

4.13 Besides assisting in the financing of education reform initiatives, external partners need to promote inter sectoral linkages among ministries with responsibility for areas such as health and nutrition, finance, maintenance of facilities; and increase awareness of educational issues through dialogue. They ought also emphasize financial management and accountability in the education sector, promote sound cost-benefit analysis of policy options and increase awareness of cost issues in education. Another critical area for support is that of obtaining information in a timely manner. Recognizing the leap forward that is required by the Region to keep abreast of and contribute to global knowledge in the sector; on a phased basis, the World Bank has proposed to link Ministries of Education to the World Bank Knowledge Management Network. This measure will enable Caribbean education practitioners and policy makers to be a dynamic part of the global knowledge network, share their experiences, practices and research findings with practitioners globally, and benefit from innovations being undertaken. This linkage will also serve to facilitate the desired regional co-operation. This does not preclude rational and regional efforts to develop richer more robust data.

4.14 Several factors will determine the nature of interventions which agencies make in the respective countries. Questions of needs, risk and potential impact must be taken into consideration. These would include: access to educational opportunities amongst the different socio-economic groups; and the extent to which lack of human capital impedes economic growth; commitment to educational reform, as evidenced in national reform strategies which address, priorities as reflected in budgetary allocations;

- capacity to implement reform programs;
- availability of counter-part funds; and
- contributions of other donors.

4.15 While it is expected that assistance for education projects will remain a major vehicle for future interventions, it is expected that these projects will be based on thorough sector analyses, long term plans and appropriate strategies, and that agencies will seek to utilize the lessons of experience in project design and implementation to provide guidance to countries in the Region. Monitoring and evaluation of projects in partnership with clients and other partners will be essential to the realization of project objectives, and long-term educational goals.

EPILOGUE

Twenty years ago the international community could not have predicted the monumental changes which have taken place in the political, economic and technological realm. It is most unlikely that anyone would dare predict the changes which are exploding. The Caribbean, like the rest of the world, must gear itself for vast, profound and unpredictable transformations. The outcomes are unknown but there are clear signals regarding the required responses. While improved education is but one of the measures, knowledge, flexibility, and a capacity to communicate globally from a deep sense of self are key. Competitiveness, retention of identity, and the well being of its citizens are at stake.

The strategic recommendations put forward in this document are by no means exhaustive, nor are they novel. They emphasize the need to rapidly improve the level of education and training of the labor force to equip them with the knowledge and skills to compete trans-nationally. Secondly, the inefficiencies and inequities in the education system which have led to, and which continue to lead to the current low levels of achievement and widening disparities in the society must be addressed as a matter of urgency. Thirdly, more concerted effort must be put into promoting the cohesion and self esteem of Caribbean people to dauntlessly face the future.

There is need for radical change from the prevailing philosophy of education in the Region. One must jettison the notion that education, like a vaccine, is given during the ages 5- 19, or for the fortunate few 5-24 and one is prepared for life. Those not immunized fall prey to the vagaries of the changing environment with little opportunity to regain a foothold. The task of catering to the needs of the under-educated labor force is a formidable one. Another outmoded belief is that there are subjects, clearly labeled and packaged to be learnt. This has led to inflexibility and compartmentalization of programs particularly at the post-secondary level. There is therefore need to review and revamp the infrastructure and curricula to promote a more integrated approach to learning.

The development of the learning society must give priority to building a solid foundation of basic education which in the Caribbean context is universalizing secondary education to enable the acquisition of the knowledge, skills and attitudes to equip persons in school and out of school for work and personal fulfillment. Early interventions at the pre-school level followed by high quality primary education are essential. Haiti must give full attention to providing universal primary education to all its people. The critical message is that education and training must be life-long. Increased, diversified and flexible opportunities at the post secondary level and on the job are especially important for competitiveness. Enormous resources are required in the short and medium term to rapidly improve capacity. These need to be effectively and efficiently deployed. Cooperation with the private sector, external partners and the implementation of equitable cost sharing measures at the post secondary level must continue to be explored.

There are hard choices to be made. The stake-holders are many and must be aware of the consequences of inaction. At the start of the last decade the Caribbean reminded itself that it was "Time for Action". This message has never been more urgent.

SELECTED BIBLIOGRAPHY

Bhajan, D. et al. " Report on Preparatory Assistance for Strengthening of Training Capapility of the Caribbean Sub-Region for Human Resource Development" Vienna. UNIDO

Bourne, Compton. 1988. Caribbean Development to the Year 2000: Challenges Prospects and Policies. Commonwealth Secretariat and CARICOM. London; Georgetown, Guyana.

Bray, Mark. 1992. Educational planning in small countries. Paris, UNESCO

CXC 1998,1999 Statistical Bulletin. Bridgetown, Barbados

CARICOM. 1990. Regional Strategy: Technical and Vocational Education and Training. Georgetown, Guyana

---------. 1992 "Strategic Options in Education at the Regional Level." Georgetown, Guyana.

------. ---. " Creative and productive Citizens for the Twenty-first Century". Georgetown. Guyana

DFID. 2000. Strategies for Achieving the International Development Targets: Education for All – The Challenge of Universal Primary Education

European Union. White Paper on Education and Training

Hallak, Jacques. 1990. Investing in the Future: Setting Educational Priorities in the Developing World. Paris. IIEP, UNESCO.

Harewood, Gordon. 2000. " Addressing the Learning Needs of Males in the Eastern Caribbean"

Henry, Ralph. "Report on Economic and Financing Issues in Education in the Commonwealth Caribbean". Trinidad. KAIRI

Jules, Vena and Panneflek,Aignald. 2000. " Education for All in the Caribbean: Assessment 2000. Kingston, Jamaica. UNESCO

Miller, Errol. 1992. Education for All: Caribbean Perspectives and Imperatives. Washington. DC. IADB.

OECD. 1998. Human Capital Investment: An International Comparison. Paris

------. 1997. Literacy Skills for the Knowledge Society: Further Results from the International Adult Literacy Survey. Paris

Partnership for Educational Revitalization in the Americas: The Future at Stake: Report of the Task Force on Education, Equity and Economic Competitiveness in Latin America and the Caribbean,

UNESCO. 1996. Learning: The Treasure Within: Report to UNESCO of the International Commission on Education for the Twenty-first Century. Paris. UNESCO

------.1998. Higher Education in the Caribbean: Report on UNESCO/CARICOM Consultation on Higher Education in the Caribbean. Caracas, International Institute for Higher Education in Latin America and the Caribbean, UNESCO

West Indian Commission. 1992. Time for Action: The Report of the West Indian Commission.

World Bank.1992. Access, Quality and Efficiency in Caribbean Education: A Regional Study. Washington, D.C.

-------. 1999. Education Sector Strategy. Washington. D. C.

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General Profile of Caribbean Countries

Country	1999 Total Population	Area (thousands of km2)	Nominal GDP m.p. 1999 (in US$)	GNP per capita 1999 (Atlas Method)
Anguilla	11,510	0.09	n/a	n/a
Antigua & Barbuda	67,430	0.44	646,970,738	9,410
Bahamas	298,020	13.94	3,655,424,929	12,266
Barbados	266,680	0.43	2,371,377,782	8,660
Belize	241,750	22.96	714,412,710	2,730
British Virgin Islands*	19,700	0.15	65,400,000	3,320
Cayman Islands*	39,335	0.26	116,900,000	2,973
Cuba	11,150,000	110.86	13,485,697,529	1,209
Dominica	73,640	0.75	254,000,000	3,170
Dominican Republic	8,404,420	48.73	17,419,059,002	1,910
Grenada	97,000	0.35	373,344,100	3,450
Guyana	866,750	214.97	668,080,961	760
Haiti	7,700,830	27.75	4,241,715,847	460
Jamaica	2,652,443	11.42	6,023,067,628	1,980
Montserrat	3,660	0.10	97,000,000	7,547
St. Kitts & Nevis	42,838	0.27	307,728,711	6,420
St. Lucia	160,880	0.62	634,813,430	3,770
St. Vincent & Grenadines	120,519	0.39	335,527,111	2,700
Suriname	431,156	163.27	1,125,785,536	2,611
Trinidad & Tobago	1,326,410	5.13	6,931,589,941	4,390
Turks & Caicos Islands	24,000	0.42	199,900,000	8,329
Region	33,998,971	623.30	59,667,795,955	1,755

Sources:

Population estimates - U.S. Bureau of the Census, International Data Base, estimates for 1999.

Cuba population estimate - World Bank, EDSTATS Data Base, estimate for 2000.

DR population estimate - Oficina Nacional de Estadistica, Informe del Banco Central 1996/1997.

Area, GDP and GNP/capita - Caribbean Development Bank, "Sector-Wide Approaches to External Assistance to Education in the Caribbean," 1999.

Cuba, Suriname, and Haiti Land Area - CIA World Factbook, 1999, http://www.odci.gov/cia/publications/factbook.

GDP - World Bank Estimates.

GNPcapita - SIMA, World Bank.

GDP and GNP/capita for the British Dependent Territories is taken from Economist Intelligence Unit (EIU) estimates.

*Population data is for 1998. Nominal GDP data for Cayman Islands also for 1998.

Population Projections by Age Group, Caribbean Region 1995-2020

Age Group	1995	2000	2005	2010	2015	2020
0- 4	1188	1211	1142	1081	1090	1126
5-11	3186	3166	3184	3161	3108	3149
12-15	1619	1820	1788	1781	1800	1754
16-18	1107	1251	1369	1308	1353	1314
19-24	1974	2188	2484	2670	2594	2675
Total Child Population	9074	9636	9967	10001	9945	10018

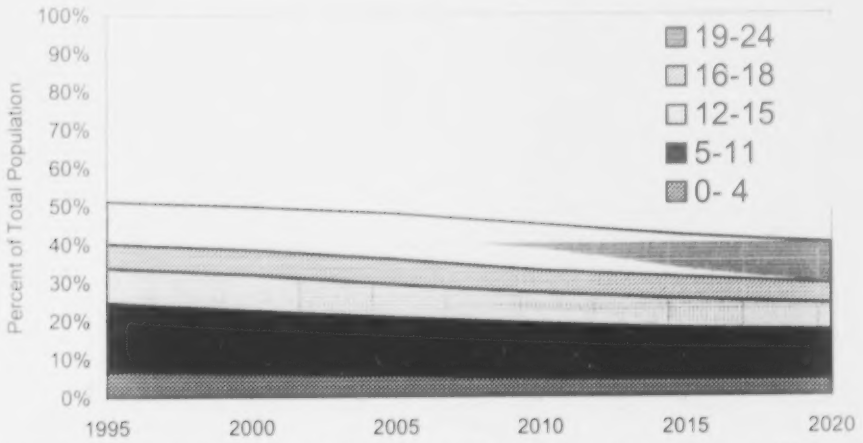
*Figures are for Belize, Guyana, Trinidad and Tobago, Barbados, St. Lucia, Haiti, and the Dominican Republic.
Sources: Official estimates, UN ECLAC/CELADE estimates, and UN Population Division estimates, 1999; World Bank estimates, 2000.

Children and Youth as Percentage of Total Population, Caribbean Region 1995-2020

Age Group	1995	2000	2005	2010	2015	2020
0- 4	7%	6%	5%	5%	5%	4%
5-11	18%	16%	15%	14%	13%	13%
12-15	9%	9%	9%	8%	8%	7%
16-18	6%	6%	7%	6%	6%	5%
19-24	11%	11%	12%	12%	11%	11%

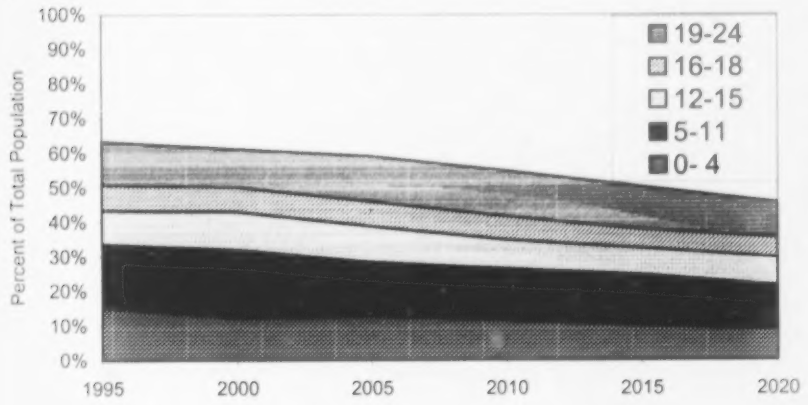
Source : Official estimates, UN ECLAC/CELADE estimates, and UN Population Division estimates, 1999.

Profile of Child and Youth Population in the Caribbean Region: Age Groups as Percentage of Total Population 1995-2020



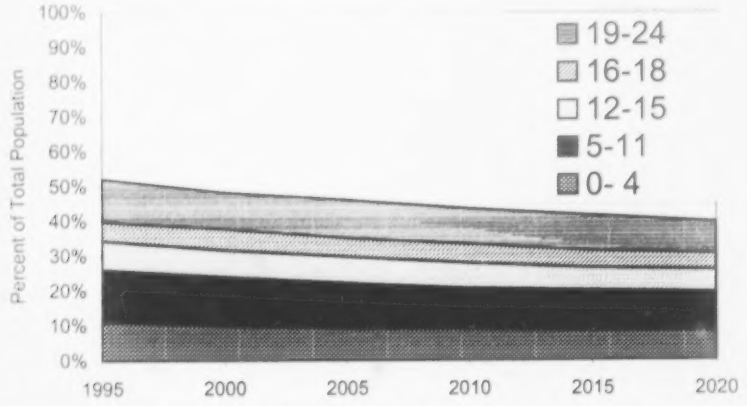
Source: Official estimates, UN ECLAC/CELADE estimates, UN Population Division estimates, 1999, World Bank estimates, 2000.
Data for: Bahamas, Barbados, Belize, Dominican Republic, Guyana, Haiti, Jamaica, Trinidad & Tobago

Profile of Child and Youth Population in Belize: Age Groups as Percentage of Total Population 1995-2020



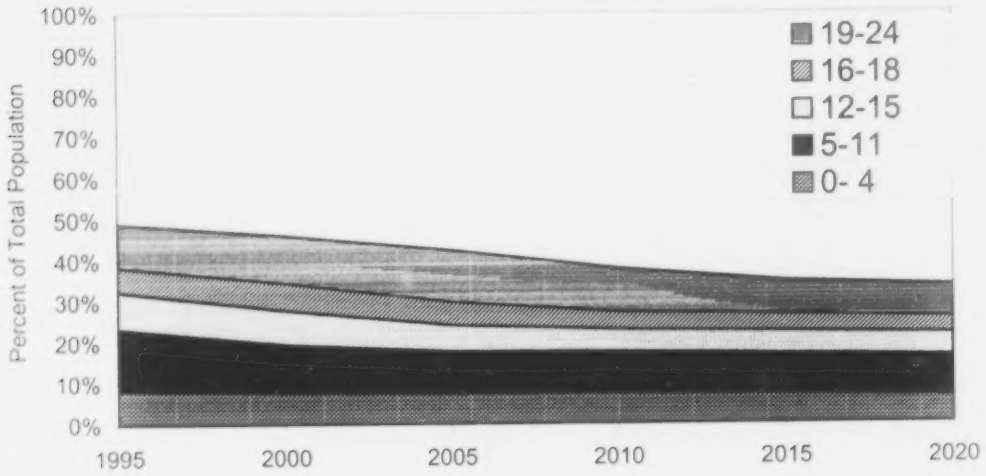
Source: Official estimates, UN ECLAC/CELADE estimates, and UN Population Division estimates, 1999.

Profile of Child and Youth Population in Guyana: Age Groups as Percentage of Total Population 1995-2020



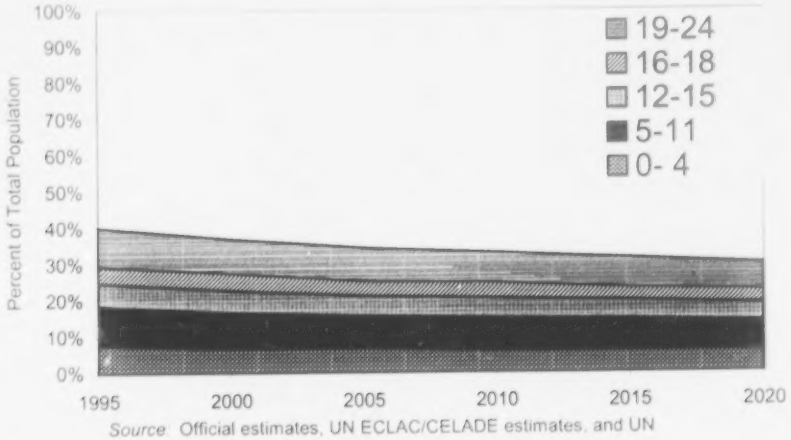
Source: Official estimates, UN ECLAC/CELADE estimates, and UN Population Division estimates, 1999.

Profile of Child and Youth Population in Trinidad and Tobago: Age Groups as Percentage of Total Population 1995-2020



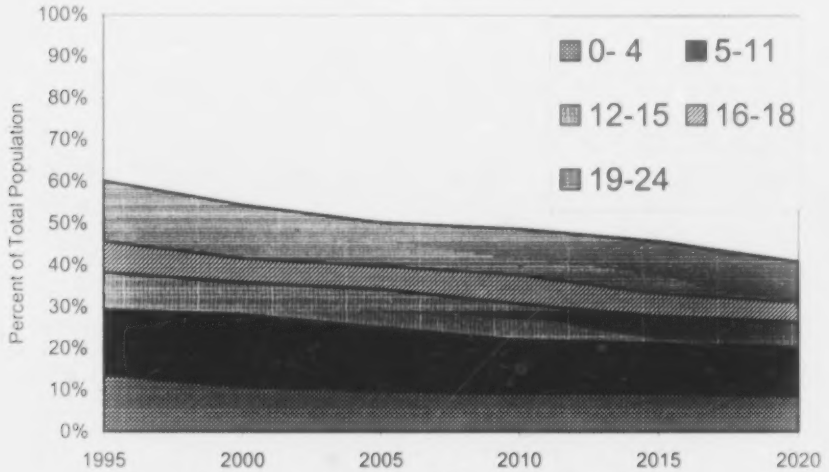
Source: Official estimates, UN ECLAC/CELADE estimates, and UN Population Division estimates, 1999.

Profile of Child and Youth Population in Barbados: Age Groups as Percentage of Total Population 1995-2020



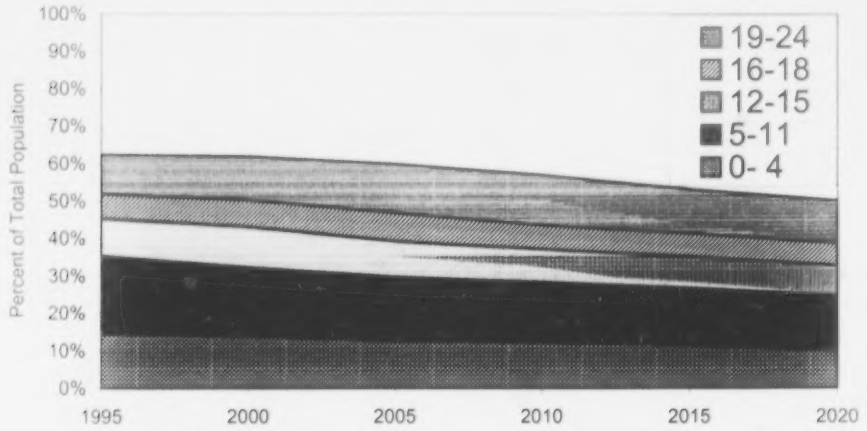
Source: Official estimates, UN ECLAC/CELADE estimates, and UN Population Division estimates, 1999.

Profile of Child and Youth Population in St. Lucia: Age Groups as Percentage of Total Population 1995-2020



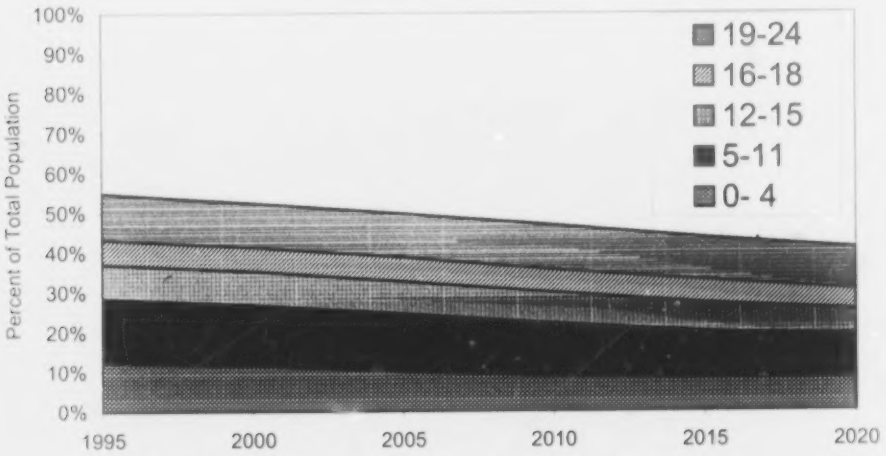
Source: Official estimates, UN ECLAC/CELADE estimates, and UN Population Division estimates, 1999.

Profile of Child and Youth Population in Haiti: Age Groups as Percentage of Total Population 1995-2020



Source: Official estimates, UN ECLAC/CELADE estimates, and UN Population Division estimates, 1999.

Profile of Child and Youth Population in the Dominican Republic: Age Groups as Percentage of Total Population 1995-2020



Source: Official estimates, UN ECLAC/CELADE estimates, and UN Population Division estimates, 1999.

Number of Students at Secondary Schools and Rate of Attrition by Gender in St. Kitts and Nevis

Form (Year)	Male	Female	Total
Form 3	557	490	1047
(1991/92)	--	--	--
Form 4	435	434	869
(1992/93)	21.9%	11.4%	17.0%
Form 5	200	344	544
(1993/94)	64.0%	31.8%	48.0%
*Form 6	92	153	245
(1994/95)	83.4%	68.7%	76.6%

*Form 6 is a two-year program.

Source: Ministry of Education, St. Kitts and Nevis.

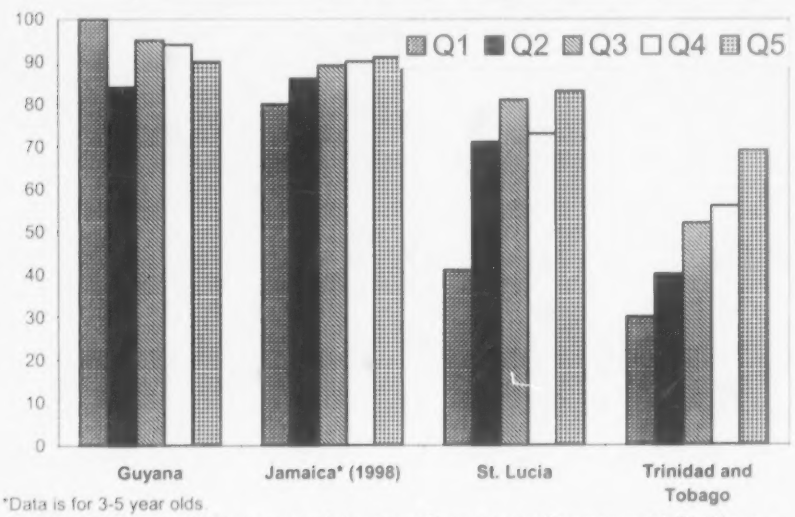
Access to Education: Preschool Attendance by Income Quintile

Country	Q1	Q2	Q3	Q4	Q5	Country Total
Guyana	100	84	95	94	90	92
Jamaica*	63	69	82	79	81	75
St. Lucia	41	71	81	73	83	66
Trinidad and Tobag	30	40	52	56	69	46

Source: World Bank, 1996, in *Issues in Educational Finance in the Commonwealth Caribbean.*

*3-5 year olds

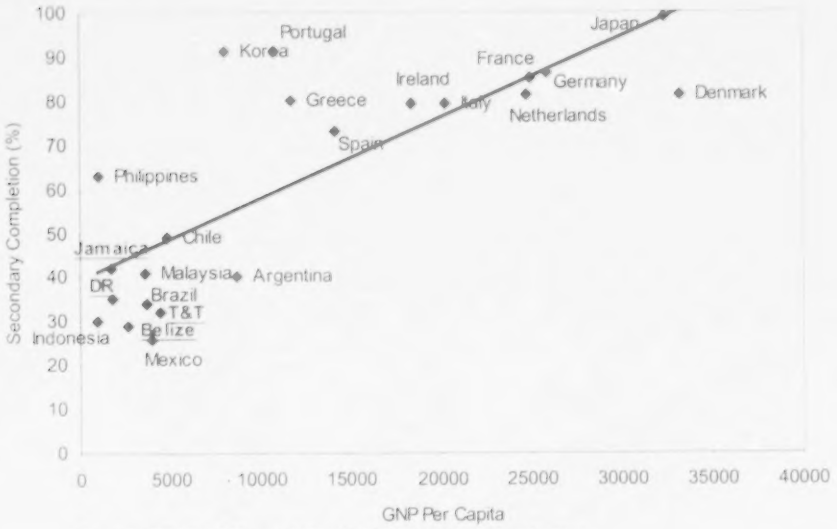
Percentage of Children Age 3-4 Attending Preschool by Quintile



*Data is for 3-5 year olds.

Source: World Bank, 1996 in *Issues in Educational Finance in the Commonwealth Caribbean.*

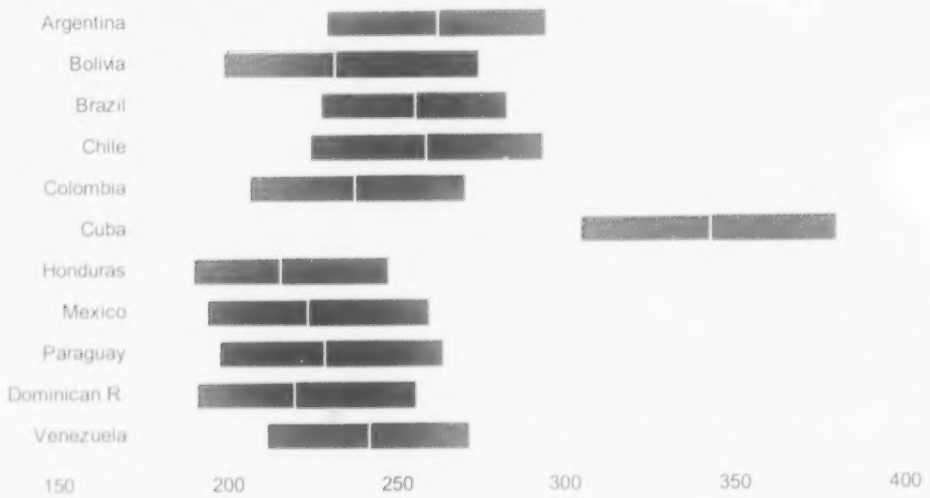
Secondary Completion Rates and GNP per Capita, Select Caribbean and OECD Countries



Source: OECD, 2000; world Bank, 2000; World Bank estimates.

Secondary Completion Rates and GNP per Capita, Select Caribbean and OECD Countries

Third Grade Language Achievement Scores: (Median, 25%, 75%)



Source: Data from Laboratoria Latinoamericano de Evaluación de la Calidad de la Educación: Primer Estudio Internacional Comparativo. Santiago, Chile: UNESCO, 1998; published in "Laboratorio Latinoamericano difunde estudio comparativo de lenguaje y matemáticas," CINDE/Dialogo Interamericano, PREAL Informa, February 1999.

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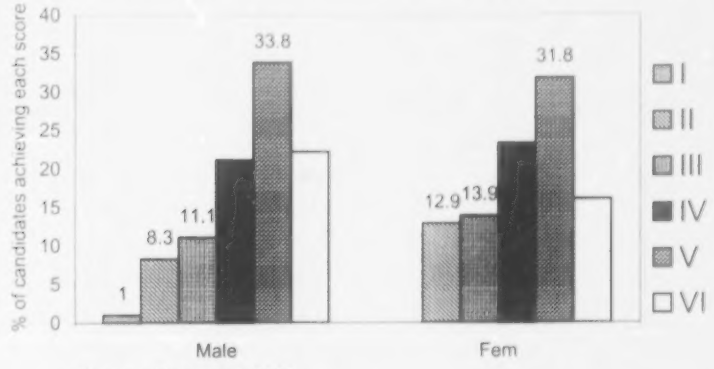
CSEC Regional Statistics

Grade Attained on English A 1996-1999

		Entries	I	II	III	IV	V	VI
1996	Male	22640	1785	5845	8988	5631	391	
	Female	36183	4311	11170	14172	6271	259	
	%M	38.5	7.9	25.8	39.7	24.9	1.7	
	%F	61.5	11.9	30.9	39.2	17.3	0.7	
1997	Male	25028	1175	6266	9098	7605	884	
	Female	39785	3270	11947	14424	9789	655	
	%M	38.6	4.7	25	36.4	30.4	3.5	
	%F	61.4	8.2	30	36.3	23.9	1.7	
1998	Male	26402	2200	2493	6134	9097	5827	651
	Female	42024	4868	4953	11463	13946	6383	411
	%M	38.6	8.3	9.4	23.2	34.5	22.1	2.5
	%F	61.4	11.6	11.8	27.3	33.2	15.2	1
1999	Male	26561	2211	2956	5590	8981	5901	922
	Female	41555	5374	5771	9680	13211	6685	834
	%M	39	8.3	11.1	21.1	33.8	22.2	3.5
	%F	61	12.9	13.9	23.3	31.8	16.1	2

Source: Harewood, 2000.

Gender-Disaggregated Outcomes: 1999 CXC English A Exam



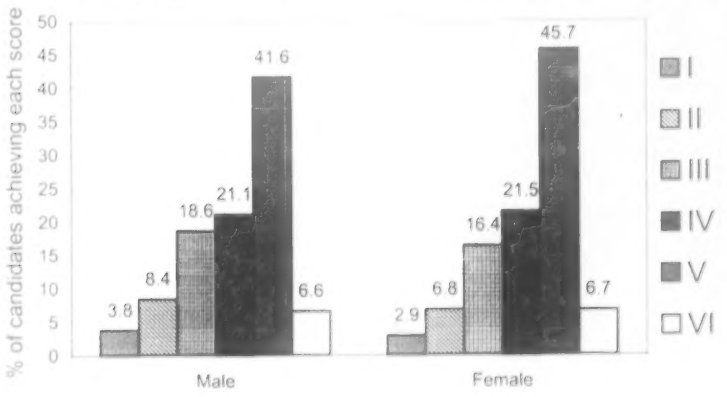
Source: Harewood, 2000.

Grade Attained on Mathematics 1996-1999

		Entries	I	II	III	IV	V	VI
1996	M	21160	2163	4363	4778	6807	3049	
	F	32711	2533	5465	7302	11918	5493	
	%M	39.3	10.2	20.6	22.6	32.2	14.4	
	%F	60.7	7.7	16.7	22.3	36.4	16.8	
1997	M	23584	1723	4405	4962	8510	3984	
	F	37213	1786	5357	7389	15495	7186	
	%M	38.8	7.3	18.7	21	36.1	16.9	
	%F	61.2	4.8	14.4	19.9	41.6	19.3	
1998	M	25188	1259	2054	4553	6328	9331	1663
	F	40257	1414	2542	6307	10306	16675	3013
	%M	38.5	5	8.2	18.1	25.1	37.1	6.6
	%F	61.5	3.5	6.3	15.7	25.6	41.4	7.5
1999	M	25553	963	2138	4743	5397	10622	1690
	F	40040	1164	2724	6548	8618	18303	2683
	%M	39	3.8	8.4	18.6	21.1	41.6	6.6
	%F	61	2.9	6.8	16.4	21.5	45.7	6.7

Source: Harewood, 2000

Gender-Disaggregated Outcomes: 1999 CXC Mathematics Exam



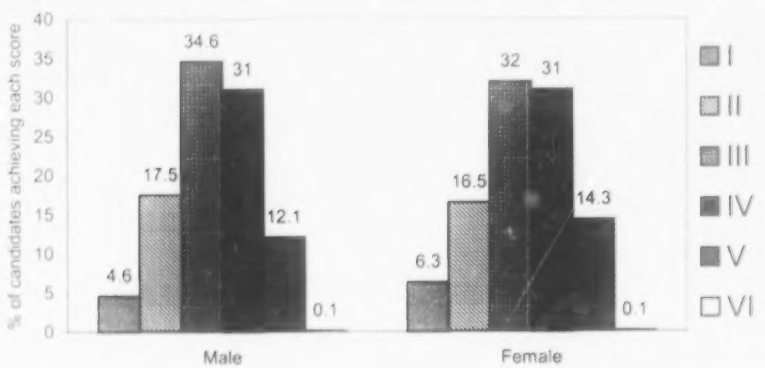
Source: Harewood, 2000

Grade Attained on Biology 1996-1999

		Entries	I	II	III	IV	V	VI
1996	M	4349	416	1634	1736	501	62	
	F	6537	596	2222	2725	906	88	
	%M	40	9.6	37.6	39.9	11.5	1.4	
	%F	60	9.1	34	41.7	13.9	1.4	
1997	M	4247	417	1518	1781	490	41	
	F	6474	652	2134	2745	893	50	
	%M	39.6	9.8	35.7	41.9	11.5	1	
	%F	60.4	10.1	33	42.4	13.8	0.8	
1998	M	4618	217	897	1534	1447	521	2
	F	6835	413	1220	2087	2253	851	11
	%M	40.3	4.7	19.4	33.2	31.3	11.3	0
	%F	59.7	6	17.9	30.5	33	12.5	0.2
1999	M	4674	216	820	1617	1450	566	5
	F	7186	449	1184	2301	2224	1024	4
	%M	39.4	4.6	17.5	34.6	31	12.1	0.1
	%F	60.6	6.3	16.5	32	31	14.3	0.1

Source: Harewood, 2000

Gender-Disaggregated Outcomes: 1999 CXC Biology Exam



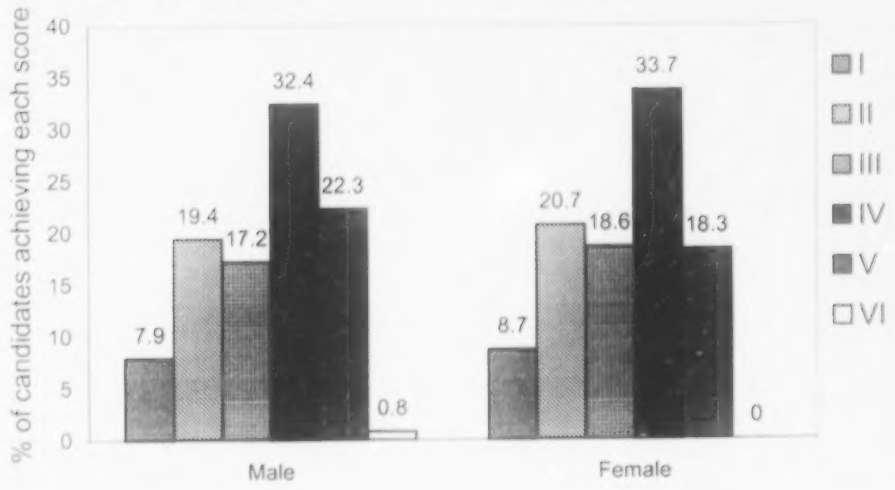
Source: Harewood, 2000

Grade Attained on Physics 1996-1999

		Entries	I	II	III	IV	V	VI
1996	M	3954	569	1131	1467	499	288	
	F	2687	358	817	1027	388	97	
	%M	59.5	14.4	28.6	37.1	12.6	7.3	
	%F	40.5	13.3	30.4	38.2	14.4	3.6	
1997	M	3961	481	1099	1451	582	348	
	F	2885	308	887	1115	408	167	
	%M	57.9	12.1	27.8	36.6	14.7	8.8	
	%F	42.1	10.7	30.8	38.7	14.1	5.8	
1998	M	4341	380	993	795	1376	757	40
	F	2883	272	700	624	992	292	3
	%M	60.1	8.8	22.9	18.3	31.7	17.4	0.9
	%F	39.9	9.4	24.3	21.6	34.4	10.1	0.1
1999	M	4560	360	885	785	1475	1018	37
	F	3155	274	654	586	1064	576	1
	%M	59.1	7.9	19.4	17.2	32.4	22.3	0.8
	%F	40.9	8.7	20.7	18.6	33.7	18.3	0

Source: Harewood, 2000.

Gender-Disaggregated Outcomes: 1999 CXC Physics Exam



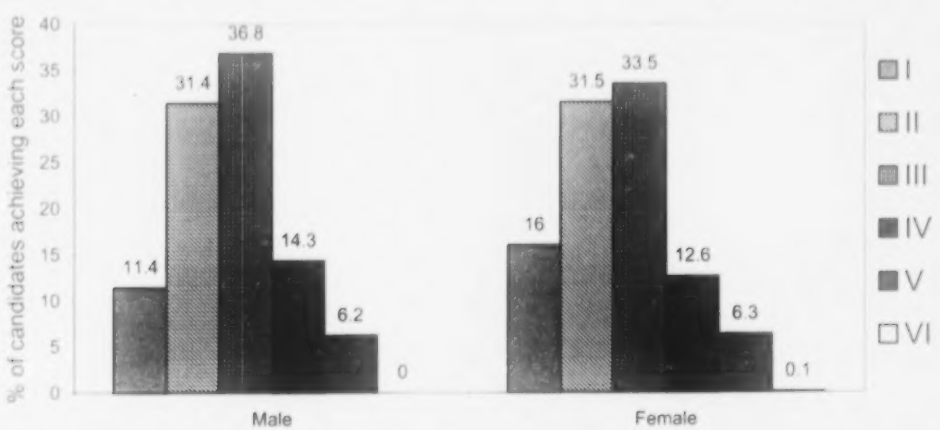
Source: Harewood, 2000.

Grade Attained on Information Technology 1996-1999

		Entries	I	II	III	IV	V	VI
1996	M	762	82	198	290	150	42	
	F	1239	136	354	439	217	93	
	%M	38.1	10.8	26	38.1	19.7	5.5	
	%F	61.9	11	28.6	35.4	17.5	7.5	
1997	M	1144	223	407	307	173	34	
	F	1887	369	613	544	300	61	
	%M	37.7	19.5	35.6	26.8	15.1	3	
	%F	62.3	19.6	32.5	28.8	15.9	3.2	
1998	M	1620	120	409	651	317	120	3
	F	2437	180	642	1018	418	176	3
	%M	39.9	7.4	25.3	40.2	19.6	7.4	0.2
	%F	60.1	7.4	26.3	41.8	17.2	7.2	0.1
1999	M	2335	266	733	858	333	144	1
	F	3505	561	1105	1175	441	221	2
	%M	40	11.4	31.4	36.8	14.3	6.2	0
	%F	60	16	31.5	33.5	12.6	6.3	0.1

Source: Harewood, 2000

Gender-Disaggregated Outcomes: 1999 CXC Information Technology Exam



Source: Harewood, 2000

Growth in Labor Force: Population Ages 16 and Over

Country	1995	2020	% Increase
Bahamas	182,000	286,000	57%
Barbados	200,000	223,000	12%
Belize	119,000	261,000	119%
Guyana	542,000	793,000	46%
Haiti	4,356,000	7,127,000	64%
Jamaica	1,655,000	2,406,000	45%
St. Lucia	91,000	138,000	52%
St. Vincent & The Grenadines	79,000	104,000	32%
Suriname	261,000	382,000	46%
Trinidad & Tobago	869,000	1,221,000	41%
Total	8,354,000	12,941,000	55%

Source: World Bank EDSTATS database, 2000.

Percentage of Adults with University Education: Comparing Recent Caribbean Immigrants to Canada and the United States with Populations in their Countries of Origin

Country	Adults in Country of Origin	Adult Immigrants U.S. 1975-80	Adult Immigrants Canada 1975-81
Females			
Barbados	2.0	37.5	8.8
Guyana	0.7	17.9	7.2
Jamaica	1.1	26.4	8.0
Trinidad & Tobago	1.5	23.8	9.9
OECS countries	0.7	16.2	9.7
Males			
Barbados	3.8	29.8	13.0
Guyana	2.0	31.3	15.1
Jamaica	1.9	21.4	14.8
OECS Countries	1.6	24.9	18.9

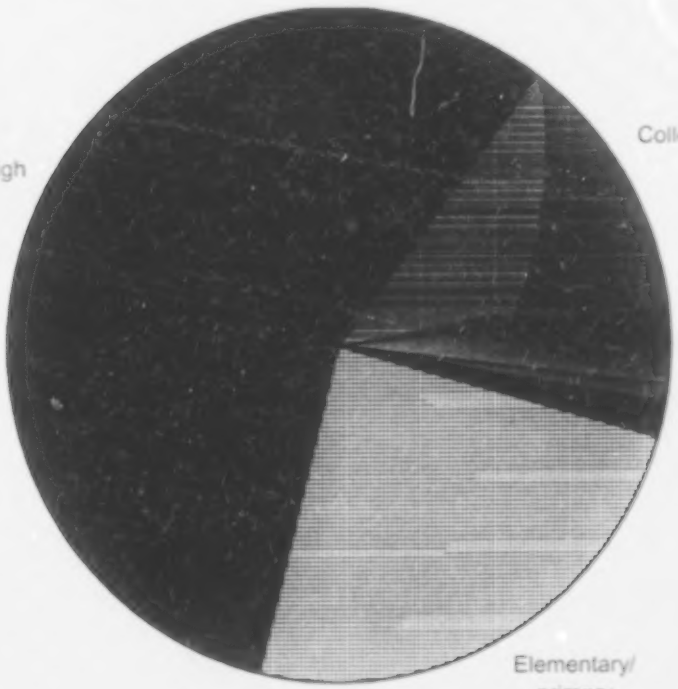
Source: Simmons and Plaza (1991)

Bahamas: Educational Attainment of Labor Force, 1996

Level of Educational Attainment	Number (thousands)	Percentage of labor force
No formal education	2,035	1.6%
Elementary/primary	31,910	24.6%
Secondary/high	73,015	56.3%
College/university	17,055	13.1%
Technical/vocational	4,725	3.6%
Not stated	1,025	0.8%
Total	129,765	100.0%

Source: ILO, 2000

Bahamas: Educational Attainment of Labor Force, 1996



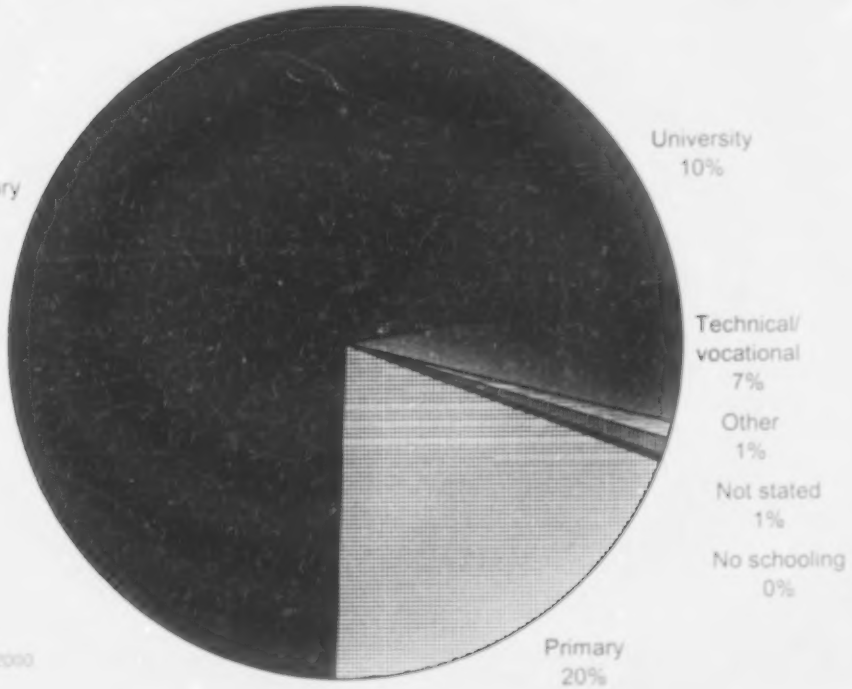
Source: ILO, 2000

Barbados: Educational Attainment of Labor Force, 1996

Level of Educational Attainment	Number (thousands)	Percentage of labor force
No schooling	0.2	0.2%
Primary	22.7	19.7%
Secondary	70.5	61.3%
University	11.9	10.3%
Technical/vocational	7.7	6.7%
Other	0.9	0.8%
Not stated	1.1	1.0%
Total	115.0	100.0%

Source: ILO, 2000

Barbados: Educational Attainment of Labor Force, 1996



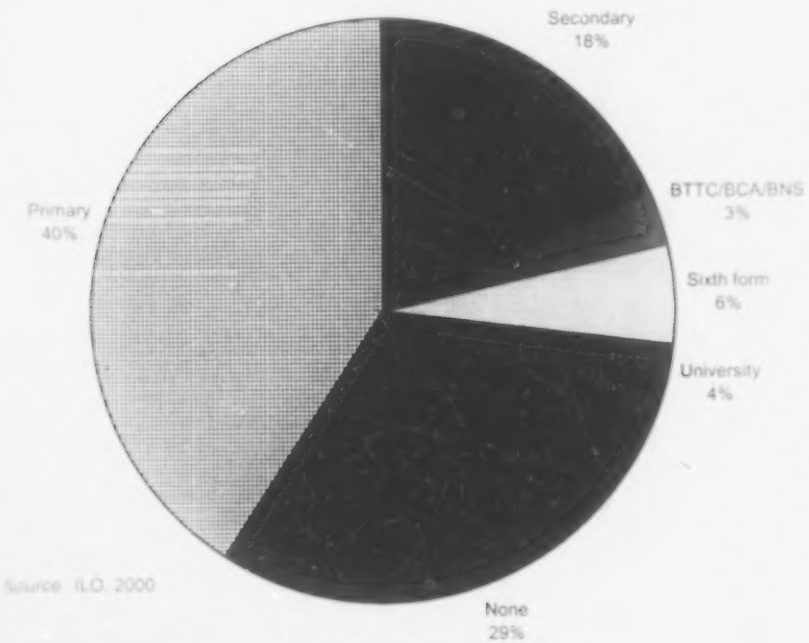
Source: ILO, 2000

Belize: Educational Attainment of Labor Force, 1996

Level of Educational Attainment	Number (thousands)	Percentage of labor force
None	18,455	28.4%
Primary	26,405	40.6%
Secondary	11,840	18.2%
BTTC/BCA/BNS	1,950	3.0%
Sixth form	3,555	5.5%
University	2,335	3.6%
Not Stated	485	0.7%
Total	65,025	100.0%

Source: ILO, 2000.

Belize: Educational Attainment of Labor Force, 1996



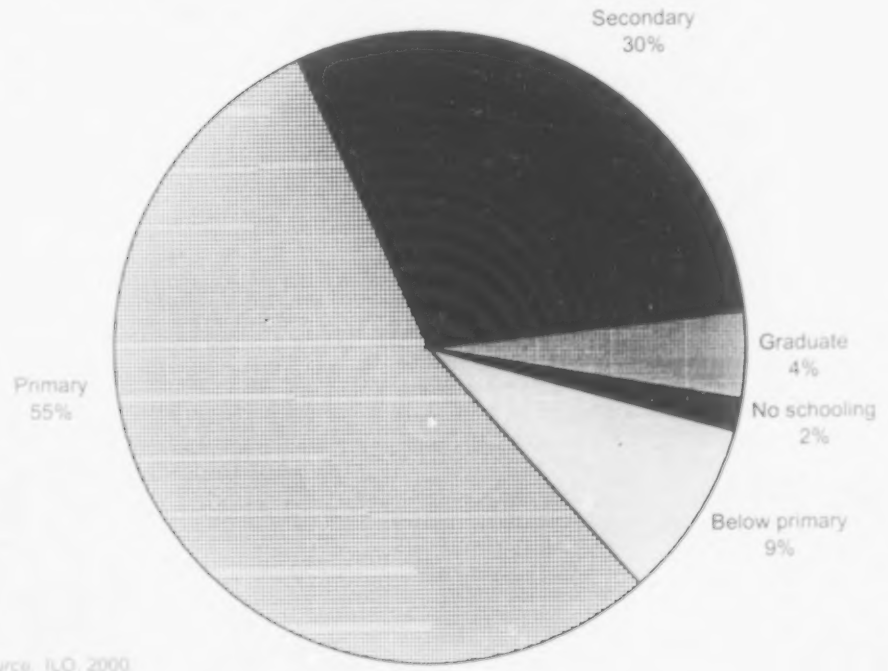
Source: ILO, 2000.

Guyana: Educational Attainment of Labor Force, 1992

Level of Educational Attainment	Number (thousands)	Percentage of labor force
No schooling	3,790	1.5%
Below primary	22,880	9.3%
Primary	134,330	54.7%
Secondary	73,720	30.0%
Graduate	10,780	4.4%
Total	245,500	100.0%

Source: ILO, 2000

Guyana: Educational Attainment of Labor Force, 1992



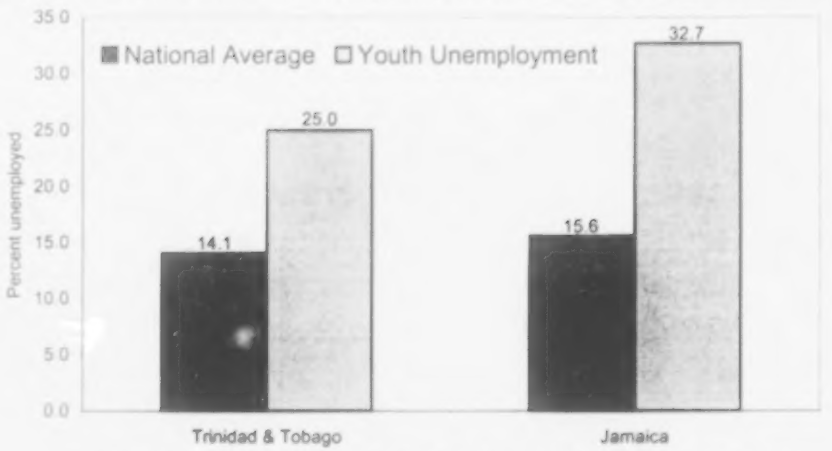
Source: ILO, 2000

Trinidad and Tobago: Educational Attainment of Labor Force, 1996

Level of Educational Attainment	Number (thousands)	Percentage of labor force
No education	2.6	0.6%
Primary (less than std. 5)	11.9	2.7%
Primary (above std. 4)	73.2	16.5%
Primary with training	86.7	19.5%
Secondary (no subjects)	36.2	8.1%
Secondary (less than 5 subjects)	14.9	3.4%
Secondary (5 or more subjects)	14.5	3.3%
Secondary (no subjects + training)	67.4	15.2%
Secondary (<5 subjects + training)	48.3	10.9%
Secondary (5 or more subjects + training)	55.8	12.6%
University education (no degree)	1.0	0.2%
University degree/diploma/certificate	31.1	7.0%
Educated in foreign country	0.6	0.1%
Total	444.2	100.0%

Source: ILO, 2000.

Unemployment and Youth Unemployment in Trinidad & Tobago and Jamaica



Source: Trinidad & Tobago Statistical Office, 1999; University of the West Indies, 2000.

Poverty Indicators, Selected Caribbean Countries

Countries	Poverty (% pop.)*	Life Expectancy (years)**	Infant Mortality (per 1,000 live births)**	Access to Clean Water (% pop.)**	Literacy (% of adult pop.)**
Antigua & Barbuda	12	75	17	95	89
The Bahamas	5	74	17	94	95
Barbados	8	76	14	100	97
Belize	33	75	28	83	93
Cuba	N/A	76	7	93	96
Dominica	28	76	15	92	94
Dominican Republic	21	71	40	73	83
Grenada	31	72	14	85	96
Guyana	43	64	57	83	98
Haiti	65	54	71	39	48
Jamaica	16	75	21	93	86
St. Kitts & Nevis	15	72	21	100	90
St. Lucia	25	70	17	99	82
St. Vincent & Grenadines	38	73	22	99	82
Suriname	39	70	28	89	93
Trinidad & Tobago	21	73	16	96	93

* Figures in this column are not strictly comparable in that they are based on the latest data available before 1997 and are not all of the same year. Most are % of population below the International Poverty Line of US$1 per day (adjusted to a 1993 price base and parity), except for Jamaica which is below US$2 per day international poverty line; Guyana, Dominican Republic and Haiti is % population below its National Poverty Line which reflects urban cost of living; and for Antigua the figure relates to its National Poverty Line based on a survey during 1989-94.

The following figures are from the report "Poverty Reduction and Human Resource Development in the Caribbean": Suriname (1986), Haiti (1987), Trinidad & Tobago (1992), Guyana (1993), The Bahamas (1994), Dominican Republic (1994), Belize (1995).

The figures for Dominica (1996), Grenada (1996), St. Lucia (1996) and St. Vincent (1996) are taken from the report "An Analysis of Poverty in the Windward Islands" , UK Dept. for International Development (DFID) – Caribbean.

The figure for Jamaica (1998) is taken from the Jamaica Survey of Living Conditions, 1998.

** These figures are for 1998, except where indicated. From SIMA database, World Bank.

Source : World Bank, World Development Indicators, Staff Estimates

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Human Development Ranks of Selected Caribbean Countries: 1992, 1995, 1999

Country	1992	1995	1999
Antigua and Barbuda	53	55	38
Bahamas	31	26	31
Barbados	20	25	29
Belize	73	29	83
Cuba	61	72	58
Dominica	52	69	53
Dominican Republic	83	96	88
Grenada	54	67	52
Guyana	92	105	99
Haiti	124	148	152
Jamaica	63	88	82
St. Kitts/Nevis	68	37	51
St. Lucia	65	84	81
St. Vincent	66	79	75
Suriname	56	77	64
Trinidad & Tobago	30	39	46

Source: Human Development Report 1999, 1995, 1992, UNDP.

Public Education Budget and GNP: Caribbean Countries

Country	GNP (Billions of dollars 1998)	GNP/Capita (Dollars 1998)	Education Expenditure (% of GNP)
Bahamas	3.29	11,830	4.3
Barbados	2.10	7,890	7.5
Belize	0.62	2,610	5.0
Cuba	17.3	1,560	10.0
Dominica	0.22	3,010	8.4
Dominican Republic	14.60	1,770	2.0
Grenada	0.31	3,170	4.7
Haiti	3.10	410	1.5
Jamaica	4.30	1,680	7.6*
St. Kitts & Nevis	0.25	6,130	4.7
St. Lucia	0.55	3,410	7.2
St. Vincent & Grenadines	0.27	2,420	6.3
Suriname	0.69	1,660	3.5

Source: World Bank EDSTATS, 2000; World Bank World Development Report, 1999/2000; CIA World Factbook, 1999; World Bank Jamaica Secondary Education Report, 19069JM, 1999; Education For All 2000 country-provided data.

*Data is for expenditure as % of GDP.

Public Education Budget and GNP: Comparitor Countries

Country	GNP (Billions of dollars 1998)	GNP/Capita (Dollars 1998)	Education Expenditure (% of GNP)
Middle Income: Average	4,419.6	2,950	5.1
Poland	150.8	3,900	5.2
Hungary	45.6	4,510	4.7
Malaysia	79.8	3,600	5.2
Philippines	78.9	1,050	2.2

Source: World Bank World Development Report, 1999/2000.

Index of Annual Expenditure on School and School Related Items by Consumption Quintile: Jamaica, 1997

Consumption Quintile	Books	Extra Lessons	Transport	Lunch & Snacks	Uniforms	Other Supplies & Board	Average
Quintile 1 (Poorest)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Quintile 2	1.0	1.6	0.9	1.5	1.2	2.6	1.5
Quintile 3	2.0	1.3	1.0	1.7	1.5	2.9	1.7
Quintile 4	3.0	1.8	1.1	2.0	1.7	0.7	1.7
Quintile 5	4.0	2.0	1.2	2.9	2.3	4.1	2.8

Source: Jamaica Survey of Living Conditions, 1997

Per Student Expenditure on Education in Selected Caribbean Countries, 1996

Country	1996 Total Educational Expenditure (in millions)	Currency	$US (in millions)	School-age population	Expenditure per capita (school age population, 5-19 years)
Bahamas	119.1	Dollar	119.1	90,000	$1,323.33
Belize	61.5	Dollar	30.8	91,000	$337.91
Cuba	1534.6	Peso	1534.6	2,422,000	$633.61
Dominican Republic	3536.6	Peso	265.7	2,710,000	$98.05
Grenada	36.0	E.C.$	13.6	33,555,000	$0.40
Guyana	4590.0	Dollar	32.9	265,000	$124.16
Jamaica	14643.0	Dollar	401.2	788,000	$509.11
St. Kitts & Nevis	23.7	E.C.$	8.9	13,758	$650.05
Trinidad & Tobago	1123.6	Dollar	196.8	387,000	$508.47
Barbados	242.1	Dollar	120.4	60,000	$2,006.17
St. Lucia	128.2	E.C.$	48.4	60,000	$806.29
Suriname	384.0	Guilder	0.6	134,000	$4.12

Source: UNESCO, 2000; population estimates from World Bank EDSTATS database; population data for St Kitts& Nevis and Grenada from Henry.

Debt Indicators for Selected Caribbean Countries

Country	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
THE BAHAMAS													
Debt Service as a % of GDP	2.8	6.8	2.3	2.6	1.8	1.4	2.4	2.5	2.6	3.0	2.7	2.7	-
Debt Service as a % of Current Revenue	13.7	35.6	12.2	15.5	12.4	9.2	14.4	14.8	15.3	16.1	13.2	13.5	-
BARBADOS													
Debt Service as a % of GDP	6.5	5.7	7.3	5.8	4.6	7.0	7.2	7.0	5.6	6.3	6.9	5.0	4.3
Debt Service as a % of Current Revenue	24.3	22.3	29.2	20.5	16.0	25.5	24.7	22.0	18.4	20.3	22.0	16.3	12.7
BELIZE													
Debt Service as a % of GDP	7.1	5.6	4.6	4.3	4.0	4.0	3.5	2.8	3.0	4.4	5.1	5.1	4.9
Debt Service as a % of Current Revenue	31.5	23.8	22.1	18.4	16.0	15.9	13.6	12.0	12.5	18.2	22.9	21.6	21.7
DOMINICA													
Debt Service as a % of GDP	4.4	1.6	2.4	4.2	3.6	3.1	2.8	3.2	3.3	3.3	3.3	3.8	4.0
Debt Service as a % of Current Revenue	13.8	5.2	7.4	13.1	11.7	10.1	9.5	11.5	12.1	12.9	11.5	13.1	14.4
GRENADA													
Debt Service as a % of GDP	2.8	3.5	3.7	3.3	1.5	1.4	1.7	1.8	1.8	1.7	2.5	1.7	1.2
Debt Service as a % of Current Revenue	7.0	10.5	13.9	13.4	5.5	5.9	7.1	7.8	6.9	7.0	10.3	6.9	5.0
GUYANA													
Debt Service as a % of GDP	-	-	7.6	6.1	8.9	32.4	20.5	13.5	21.6	22.3	16.7	14.8	17.8
Debt Service as a % of Current Revenue	-	-	21.0	14.6	28.5	94.9	67.7	35.5	58.8	71.1	50.0	41.7	55.5
JAMAICA													
Debt Service as a % of GDP	22.3	24.3	23.2	21.8	16.4	15.6	16.6	19.1	13.0	12.5	11.4	9.7	7.6
Debt Service as a % of Current Revenue	75.5	76.7	71.8	70.3	54.8	57.7	57.7	67.1	43.2	42.2	37.2	35.5	28.1
ST. KITTS/NEVIS													
Debt Service as a % of GDP	1.9	1.1	1.3	1.2	2.2	2.1	2.1	2.4	2.4	2.6	2.7	2.5	2.5
Debt Service as a % of Current Revenue	8.2	4.3	5.2	5.1	9.3	8.6	9.5	10.3	9.5	9.7	9.0	8.5	8.2
ST. LUCIA													
Debt Service as a % of GDP	2.0	0.6	0.9	1.0	1.4	1.0	1.2	1.4	1.8	1.5	1.5	1.6	1.6
Debt Service as a % of Current Revenue	8.0	2.7	3.6	3.9	5.5	4.0	4.7	6.0	7.2	6.3	6.4	6.8	6.9
TRINIDAD & TOBAGO													
Debt Service as a % of GDP	-	-	-	-	-	9.0	9.1	11.4	13.5	11.8	8.1	6.9	8.2
Debt Service as a % of Current Revenue	-	-	-	-	-	35.0	30.1	43.3	49.2	46.3	30.5	24.8	32.5

Source: Ralph Henry, " Report on Economic and Financing Issues in Education in the Commonwealth Caribbean, 1999

World Bank Assistance to Caribbean for Education: 1970-1999

Country	Year approved	Project ID #	Project Name	Loan Amount (us $ mill)	Credit Amount (us $ mill)	Total (us $ mill)	Project Cost (us $ mill)
Bahamas	1981	79531	First Vocational & Technical Education	7.0 (40%)	----	7.0 (40%)	17.50
Bahamas	1988	81554	Second Technical & Vocational Training	10.0 (57%)	----	10.0 (57%)	17.4
Barbados	1978	79529	Education	12.0 (53%)	----	12.0 (53%)	22.43
Barbados	1986	80448	Second Education & Training	10.0 (19%)	----	10.0 (19%)	52.0
Barbados	1993	110517	Human Resources	7.8 (50%)	----	7.8 (50%)	15.6
Belize	1992	6101	Primary Education Development	7.1 (56%)	----	7.1 (56%)	12.6
CaribbeanRegion	1987	80744	Fourth Caribbean Development Bank: Regional Vocational & Technical Education	----	6.0 (38%)	6.0 (38%)	16.0
Dominica	1995	193922	Basic Education Reform	3.07 (39%)	3.07 (39%)	6.1 (77%)	7.9
Dominican Republic	1970	81848	First Education		4.0 (42%)	4.0 42%	9.59
Dominican Republic	1975	79352	Second Education	8.0 (56%)	----	8.0 (56%)	14.23
Dominican Republic	1991	82229	Primary Education Development	15.0 (88%)	----	15.0 (88%)	17.0
Grenada	1995	147895	Basic Education Reform	3.80 (38%)	3.80 (38%)	7.6 (77%)	9.9
Guyana		GYPE1			0139		
Guyana	1975		Secondary Education	8.0	4.0	12.0	19.38
Guyana		7269			17.3		17.3
Haiti	1976	79550	First Education	----	5.5 (71%)	5.5 (71%)	7.8
Haiti	1982	79546	Second Education	----	10.0 (75%)	10.0 (75%)	13.3
Haiti	1982	79537	Third Education	----	9.0 (91%)	9.0 (91%)	9.9

Country	Year approved	Project ID #	Project Name	Loan Amount (us $ mill)	Credit Amount (us $ mill)	Total (us $ mill)	Project Cost (us $ mill)
Haiti	1985	80168	Fourth Education and Training	----	10.0 (65%)	10.0 (65%)	15.5
Jamaica	1971	80218	Second Education	13.5 (44%)	----	13.5 (44%)	30.6
Jamaica	1981	80236	Third Education (Technical & Vocational)	6.8 (56%)	----	6.8 (56%)	12.1
Jamaica	1987	80868	Education Program Preparation and Student Loan	8.3 (75%)	----	8.3 (75%)	11.1 (estimated)
Jamaica	1993	95011	Reform of Secondary Education	32.0 (79%)	----	32.0 (79%)	40.7
Jamaica	1996	621735	Student Loan	28.5 (74%)	----	28.5 (74%)	38.5
St. Lucia	1994	359266	Basic Education Reform	3.36 (26%)	3.36 (26%)	6.7 (52%)	12.8
Trinidad & Tobago	1972	79978	Second Education	9.3 (34%)	----	9.3 (34%)	27.47
Trinidad & Tobago	1979	79983	Third Education	20.0 (11%)	----	20.0 (11%)	187.9
Trinidad & Tobago	1995	591150	Basic Education	51.0 (42%)	----	51.0 (42%)	121.7
Trinidad & Tobago	1991	82921	Education & Training For Youth Employment	20.7 (65%)	----	20.7 (65%)	31.9
TOTAL	----	----	----	**277.03 (35%)**	**54.73 (7%)**	**349.2 (44%)**	**790.72**

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Inter-American Development Bank Assistance to Caribbean for Education: 1970-1999

Country	Year Approved	Approved Project Description	Loan Amount (us $ mill)
Bahamas	1994	Basic and Secondary Education Improvement	21.0
Barbados	1972	Barbados Community College	2.8
Barbados	1976	Construction/Equipment for S.J.Prescod Polytechnic Institute	6.4
Barbados	1977	Establish Student Revolving Loan	0.5
Barbados	1983	Student Revolving Loan Fund II	2.0
Barbados	1986	Education and Training Program	18.8
Barbados	1989	Revolving Student Fund III	4.7
Barbados	1992	Basic Education	11.6
Barbados	1998	Education Sector Improvement Program	85.0
Dominican Republic	1971	Consolidation/Amplification Capacity of Academic/Institute	3.3
Dominican Republic	1976	Second Step Institutional Development Plan	3.8
Dominican Republic	1981	Amplification/Improvement of Technical Professional Education System	7.1
Dominican Republic	1982	Consolidation/Expansion Academic-Intec	5.4
Dominican Republic	1989	Technical Vocational Education	20.0
Dominican Republic	1991	Improvement of Basic Education System	29.3
Dominican Republic	1995	Improvement of Basic Education II	52.0
Guyana	1985	Human Resources Development Program	14.3
Guyana	1989	Primary Education Improvement Program	46.4
Haiti	1977	Integrated Education Project for Rural Development	4.1
Haiti	1985	Expansion/Improvement Basic and Normal Education	11.9
Haiti	1995	Basic Education	17.6
Haiti	1998	Basic Education Program	19.4
Jamaica	1970	Student Loan Fund	4.4
Jamaica	1976	Student Loan Fund II	5.2
Jamaica	1983	Primary Education	36.5
Jamaica	1992	Improvement of Basic Education Phase II	28.0
Regional	1992	University of West Indies	56.0
Suriname	1985	Primary Education Quality Improvement	3.8
Trinidad & Tobago	1972	Student Revolving Fund	1.6
Trinidad & Tobago	1972	Vocational/Educational Development Program	1.6
Trinidad & Tobago	1999	Program of Secondary Education	105.0
Trinidad & Tobago	1986	Primary Education Program	36.0
TOTAL	----	----	**665.5**

Caribbean Development Bank Assistance to Caribbean for Education: 1970-1999

Country	Year	Project Name	Amounts (us $ mill)	Total (us $ mill.)
Anguilla	1983	Student Loan Scheme (SLS)	0.1	
	1998	Student Loan Scheme (SLS)	0.75	
	1986	Line of Credit (LOC)	0.15	
	1990	Line of Credit (LOC)	0.5	
				1.500
Antigua & Barbuda	1973	Student Loan Scheme	0.036	
	1976	Student Loan Scheme	0.04	
	1977	Student Loan Scheme	0.234	
	1997	Student Loan Scheme	1.5	
	1997	Basic Education Project	10.640	
				12.450
Barbados	1978	Caribbean Development Facility (CDF)	0.5	
	1979	Caribbean Development Facility (CDF)	1.3	
	1982	Caribbean Development Facility	2.6	
	1982	Caribbean Development Facility	2.8	
	1995	Secondary Education Project	12.226	
	1998	Education Enhancement Program	31.500	
				50.926
Belize	1974	Student Loan Scheme	0.096	
	1977	Student Loan Scheme	0.336	
	1986	Student Loan Scheme	0.7	
	1993	Student Loan Scheme	0.5	
	1996	Student Loan Scheme	2.0	
	1998	Student Loan Scheme	2.0	
				5.632
British Virgin Island	1973	Student Loan Scheme	0.097	
	1980	Student Loan Scheme	0.184	
	1985	Line of Credit	0.300	
	1986	Student Loan Scheme	0.4	
	1993	Student Loan Scheme	0.6	
	1999	Student Loan Scheme	1.5	
				3.081
Cayman Island	1973	Student Loan Scheme	0.06	
	1978	Student Loan Scheme	0.1	
	1985	Line of Credit	0.300	
				0.460

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Country	Year	Project Name	Amounts (us $ mill)	Total (us $ mill.)
Dominica	1972	Student Loan Scheme	0.073	
	1977	Student Loan Scheme	0.87	
	1980	Student Loan Scheme	0.26	
	1984	Student Loan Scheme	0.4	
	1986	Student Loan Scheme	0.6	
	1987	Technical Vocational OECS	0.955	
	1988	Student Loan Scheme	0.839	
	1990	Line of Credit	1.0	
	1992	Line of Credit	1.0	
	1997	Student Loan Scheme	1.5	
				7.497
Grenada	1973	Student Loan Scheme	0.57	
	1978	Student Loan Scheme	0.121	
	1983	Student Loan Scheme	0.10	
	1985	Student Loan Scheme	0.4	
	1987	Student Loan Scheme	0.6	
	1987	Technical Vocational OECS	0.872	
	1988	Student Loan Scheme	0.5	
	1997	Student Loan Scheme	0.5	
				3.663
Guyana	1978	Caribbean Development Facility	0.5	
	1979	Caribbean Development Facility	1.0	
				1.5
Jamaica	1978	Caribbean Development Facility	2.0	
	1979	Caribbean Development Facility	0.6	
	1998	Caribbean Development Facility	1.106	
	1999	Technology Innovation Centre	2.9	
				6.606
Montserrat	1977	Student Loan Scheme	0.131	
	1988	Student Loan Scheme	0.5	
	1993	Line of Credit	0.3	
				0.931
Regional	1992	University of West Indies (UWI) Distance Education	8.896	8.896
St. Kitts & Nevis	1973	Student Loan Scheme	0.54	
	1981	Student Loan Scheme	0.239	
	1984	Student Loan Scheme	0.346	
	1986	Student Loan Scheme	0.563	

Country	Year	Project Name	Amounts (us $ mill)	Total (us $ mill.)
	1987	Technical Vocational OECS	1.34	
	1988	Line of Credit	1.0	
	1991	Line of Credit	2.0	
	1996	Line of Credit	1.625	
	1996	Basic Education Project	11.180	
(Hurricane Georges)	1998	Rehabilitation of Schools	1.378	
	1999	Rehabilitation of Schools	1.5	
				21.711
St. Lucia	1972	Student Loan Scheme	0.073	
	1975	Student Loan Scheme	0.024	
	1977	Student Loan Scheme	0.072	
	1977	Student Loan Scheme	0.431	
	1982	Student Loan Scheme	0.400	
	1984	Student Loan Scheme	0.616	
	1987	Technical Vocational OECS	0.871	
	1990	Student Loan Scheme	0.800	
	1990	Student Loan Scheme	0.200	
	1993	Line of Credit	2.0	
	1993	Line of Credit	1.0	
	1995	Line of Credit	1.5	
	1995	Line of Credit	1.5	
	1995	Basic Education	4.2	
	1997	Student Loan Scheme	3.0	
	1999	Line of Credit	4.0	
	1999	Basic Education Project	6.39	
				27.077
St. Vincent & the Grenadines	1972	Student Loan Scheme	0.071	
	1975	Student Loan Scheme	0.095	
	1976	Student Loan Scheme	0.185	
	1981	Student Loan Scheme	0.35	
	1985	Student Loan Scheme	0.35	
	1987	Technical Vocational OECS	1.492	
	1990	Line of Credit	0.40	
	1996	Basic Education	6.083	
	1998	Student Loan Scheme	1.0	
				10.026
Turks & Caicos	1981	Student Loan Scheme	0.1	
	1984	Student Loan Scheme	0.2	

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Country	Year	Project Name	Amounts (us $ mill)	Total (us $ mill.)
	1989	Student Loan Scheme	0.3	
	1995	Student Loan Scheme	0.3	
	1997	Project Manager	0.75	
	1997	Further Education	3.971	
				5.621
TOTAL	----	-----	167.577	167.577

CARIBBEAN EDUCATION STRATEGY

LIST OF RESEARCH PAPERS

Title	Author
Major Reports	
"Economic and Financing Issues in Education in the Commonwealth Caribbean"	Ralph Henry
"Designing Education Projects that respond to key Educational Issues: Perspectives from eight World Bank-Funded projects"	Patricia Maughan
Addressing the Learning Needs of Males in the Eastern Caribbean	Gordon Harewood
Report on Workshop on "Improving Externally Financed Education Projects and Education reform in the Caribbean"	Robert Youker
"Regional Projects in Education in the Commonwealth Caribbean"	Errol Miller
Pockets of Excellence - Short Studies on Exemplary practices	
"Case of Heart/NTA and Science Teaching at the Early Childhood Level"	Sharon Gardner
Health and Family Life Education (HFLE) Project in the English Speaking Caribbean	Samuel Lochan
"Adult Literacy Tutor Association (ALTA)	Samuel Lochan
"Science Matters in Life Every Day (S.M.I.L.E)" - A Model for early childhood hands-on science (ICWI Group Foundation)	Jeanne Robinson
"The Youth Training and Employment Partnership Program in Trinidad and Tobago: A Second Chance for Youth" (YTEPP)	David Subran
"Service Volunteered For All" (SERVOL)	David Subran